ORDER NO. VRD9408M134

Service Manual

General Description
Adjustment Procedures
Block/Schematic Diagrams
Exploded Views/Parts List

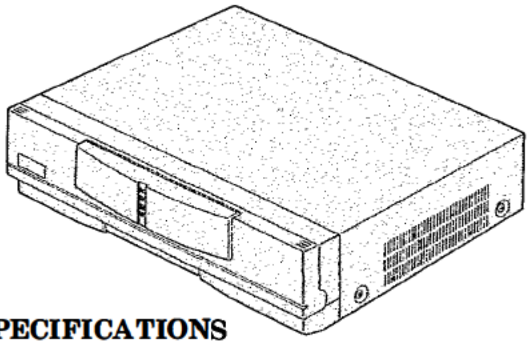
Video Cassette Recorder

Panasonic S-VHS 625 VHS PAL

Hi-Fi HQ

NV-HS1000B EC

K-MECHANISM



SPECIFICATIONS

ITEM	SPECIFICATION	
POWER	SOURCE: 220−240V AC 50/60Hz	
	CONSUMPTION: 41 watts	
RECORDING SYSTEM	2 rotary heads, helical scanning system	
	PAL	
TV TUNER SYSTEM	NV HS1000B	UHF: CH21~CH69 (PAL I) 75Ω terminated
	NV-HS1000EC	VHF: CHE2~CHS3 VHF III: CHM1~CHE12 VHF H: CHU1~CHS41 (PAL B) UHF: CH21~CH69 (PAL G) 75Ω terminated
RF OUT SYSTEM	NV HS1000B	UHF: 36±6 (PAL I) 73±3dBμ, 75Ω terminated
	NV-HS1000EC	UHF: 36±4 (PAL G) 70^{+2}_{-3}dBμ, 75Ω terminated
VIDEO	HEADS: 4 rotary heads 1 pair for SP recording, playback and trick play (L-R heads) 1 pair for LP recording, playback and trick play (L′ R′ heads) 1 flying erase head	
	INPUT: EURO AV (AV1, AV2) Connectors (21 pin) 1.0Vp-p, 75Ω unbalanced S VIDEO IN (AV3) Connector Y: 1.0Vp-p, 75Ω unbalanced C: 0.3Vp-p, 75Ω unbalanced VIDEO IN (AV3) Connector (Phono type) 1.0Vp-p, 75Ω unbalanced	
	OUTPUT: EURO AV (AV1, AV2) Connectors (21 pin) 1.0Vp-p, 75Ω unbalanced S VIDEO OUT Connector Y: 1.0Vp-p, 75Ω unbalanced C: 0.3Vp-p, 75Ω unbalanced VIDEO OUT Connector (Phono type) 1.0Vp-p, 75Ω unbalanced	

ITEM	SPECIFICATION
AUDIO	HEAD: 1 stationary head (Normal Audio) 2 rotary heads (Hi-Fi 2CH)
	INPUT: EURO AV (AV1, AV2) Connectors (21 pin) More than −6dBV (500mV), More than 10kΩ AUDIO IN (AV3) Connector (Phono type) More than −10dBV (316mV), More than 47kΩ MICROPHONE JACK −70dBV
	OUTPUT: EURO AV (AV1, AV2) Connectors (21 pin) −6dBV (500mV), Less than 1kΩ AUDIO OUT Connector (Phono type) −8dBV (400mV), Less than 1kΩ HEADPHONE JACK −30dBV, 8Ω
	TRACK: 1 track (Normal mono only) 2 channels (Hi-Fi Sound-Stereo)
TAPE FORMAT	S-VHS, VHS Cassette tape (Tape width 12.7mm)
TAPE SPEED	SP: 23.39mm/s (PAL), 33.35mm/s (NTSC) LP: 11.695mm/s (PAL), 11.12mm/s (NTSC) Record/Playback Time: SP: 4 hours with 240min. type tape LP: 8 hours with 240min. type tape FF/REW Time: 2.5min. with 180min. type tape
DIMENSIONS	430(W)×120(H)×398(D) mm
WEIGHT	7.4kg
STANDARD ACCESSORIES	1 pc. DIN-RF Cable 1 pc. Infra red Remote Controller 1 pc. Audio Cables 1 pc. AC Mains Lead 1 pc. EDIT 5 pin Cable 1 pc. S VIDEO 4P Cable

Weight and dimensions shown are approximate.
Specifications are subject to change without notice.

Panasonic

INTRODUCTION

This service manual contains technical information which will allow service personnels to understand and service this model.
Section 1 presents you with technical know how for actual servicing and general information of features and controls, enabling you to become familiar with each function.
Section 2 presents to your mechanical and electrical adjustment information as well disassembly and replacement procedures.
In the case of very common information relating to other models like mechanical adjustments, please refer to the appropriate service manual.
Section 3, 4 contains block diagrams which provides you with information for checking and understanding each circuit. Schematic diagrams which give you detailed information such as waveforms, voltage data, function e.t.c. ...
Section 5 contains exploded views and parts list.
Please place orders using the parts list and not the drawing reference numbers.
If the circuit is changed or modified, this information will be followed by supplementary service manual to be filed with original service manual.

CONTENTS

TECHNICAL INFORMATION

SECTION 1 GENERAL DESCRIPTIONS 1-1
1-1. SERVICE INFORMATION 1-1
1-2. SERIAL CLOCK TRANSMISSION ERROR DISPLAY 1-6
1-3. SERVICE INFORMATION DISPLAY 1-6
1-4. TECHNICAL INFORMATION 1-12
1-5. OPERATING INSTRUCTIONS 1-21

SECTION 2 ADJUSTMENT PROCEDURES 2-1
2-1. DISASSEMBLY METHOD 2-1
2-2. MECHANICAL ADJUSTMENT PROCEDURES 2-3
2-3. DISASSEMBLY PROCEDURES OF MECHANISM 2-4
2-4. ASSEMBLY PROCEDURES OF MECHANISM 2-4
2-5. ELECTRICAL ADJUSTMENT PROCEDURES 2-7

SECTION 3 BLOCK DIAGRAMS 3-1
3-1. ABBREVIATIONS 3-1
3-2. EDIT BLOCK DIAGRAM 3-5
3-3. SYSTEM CONTROL & SERVO BLOCK DIAGRAM 3-7
3-4. LUMINANCE & CHROMINANCE BLOCK DIAGRAM 3-12
3-5. TBC BLOCK DIAGRAM 3-17
3-6. Hi-Fi AUDIO BLOCK DIAGRAM 3-20

SECTION 4 SCHEMATIC DIAGRAMS 4-1

4-1. POWER SCHEMATIC DIAGRAM 4-1
4-2. POWER C.B.A. 4-4
4-3. SYSTEM CONTROL & SERVO SECTION IN MAIN SCHEMATIC DIAGRAM 4-6
4-4. AUDIO SECTION IN MAIN & SUB AUDIO PACK SCHEMATIC DIAGRAM 4-14
4-5. LUMINANCE & CHROMINANCE SECTION IN MAIN SCHEMATIC DIAGRAM 4-17
4-6. MAIN C.B.A. 4-21
4-7. CAPSTAN DRIVE PACK SCHEMATIC DIAGRAM 4-25
4-8. CAPSTAN DRIVE PACK C.B.A. 4-28
4-9. LUMINANCE & CHROMINANCE PACK SCHEMATIC DIAGRAM 4-30
4-10. LUMINANCE & CHROMINANCE PACK C.B.A. 4-35
4-11. SUB LUMINANCE & CHROMINANCE PACK C.B.A. 4-38
4-12. SUB LUMINANCE & CHROMINANCE PACK SCHEMATIC DIAGRAM 4-41
4-13. TBC SCHEMATIC DIAGRAM 4-45
4-14. TBC C.B.A. 4-49
4-15. HEAD AMP C.B.A. 4-51
4-16. HEAD AMP SCHEMATIC DIAGRAM 4-53
4-17. Hi-Fi AUDIO PACK SCHEMATIC DIAGRAM 4-56
4-18. Hi-Fi AUDIO PACK C.B.A. 4-59
4-19. INPUT/OUTPUT PACK SCHEMATIC DIAGRAM 4-62
4-20. INPUT/OUTPUT PACK C.B.A. 4-65
4-21. NICAM DECODER PACK SCHEMATIC DIAGRAM 4-68
4-22. NICAM DECODER PACK C.B.A. 4-71
4-23. DECODER PACK SCHEMATIC DIAGRAM (NV-HS1000EC) 4-75
4-24. DECODER PACK C.B.A. (NV-HS1000EC) 4-77
4-25. TV DEMODULATOR PACK SCHEMATIC DIAGRAM (NV-HS1000B) 4-79
4-26. TV DEMODULATOR PACK C.B.A. (NV-HS1000B) 4-82
4-27. TIMER & VR SCHEMATIC DIAGRAM 4-84
4-28. TIMER C.B.A. & VR C.B.A. 4-89
4-29. TV DEMODULATOR PACK SCHEMATIC DIAGRAM (NV-HS1000EC) 4-94
4-30. TV DEMODULATOR PACK C.B.A. (NV-HS1000EC) 4-96

SECTION 5 EXPLODED VIEWS & PARTS LIST 5-1

5-1. EXPLODED VIEW & MECHANICAL REPLACEMENT PARTS LIST 5-1
  1. CHASSIS PARTS SECTION (1) 5-1
  2. CHASSIS PARTS SECTION (2) 5-3
  3. CASING PARTS SECTION 5-4
  4. PACKING PARTS SECTION 5-6
  5. REMOTE CONTROLLER UNIT 5-7
5-2. ELECTRICAL REPLACEMENT PARTS LIST 5-8

Technical Information

Subject: How to install the PDC DECODER (VW-PDC1E)

1. Do not connect the video recorder to the AC outlet.
2. Remove the 4 screws (A) and the Top Panel. (Fig. P1)
3. Remove the 3 screws (B), 2 screws (C) and unlock the tab (D). (Fig. P2)
4. Lift the Main C.B.A. up side down and lie it on the Cassette Compartment.
   Insert the PDC Decoder. (Fig. P3)

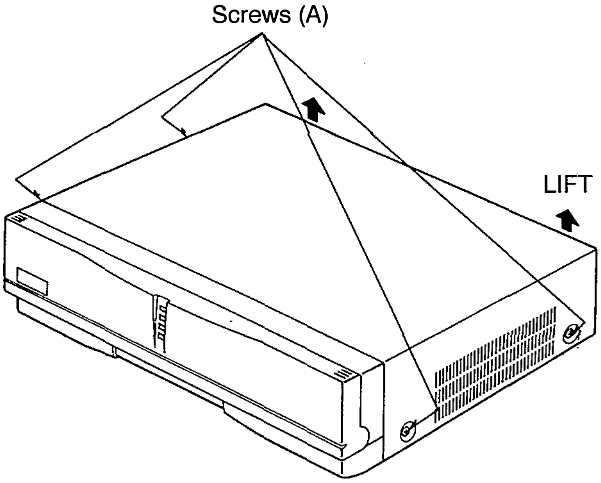

Screws (A)
LIFT

Fig. P1

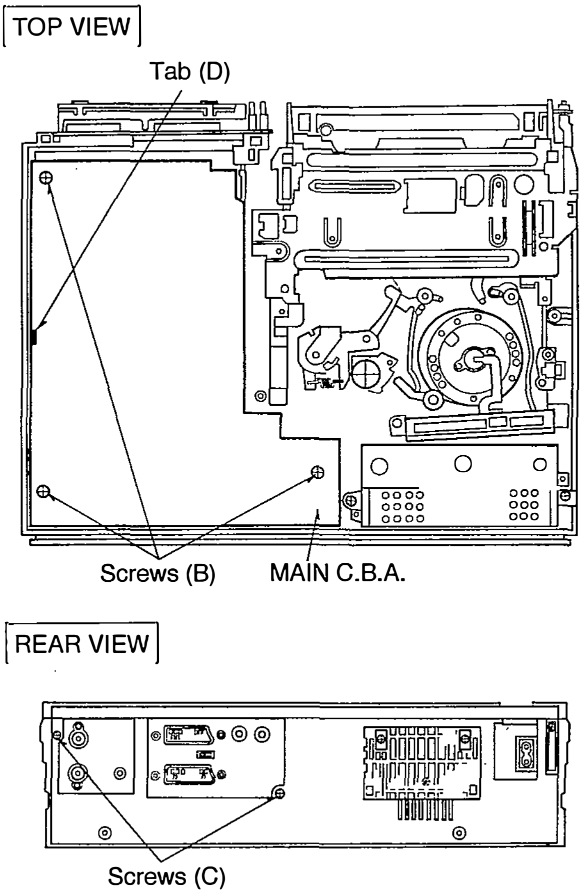

TOP VIEW
Tab (D)
Screws (B)
MAIN C.B.A.
REAR VIEW
Screws (C)

Fig. P2

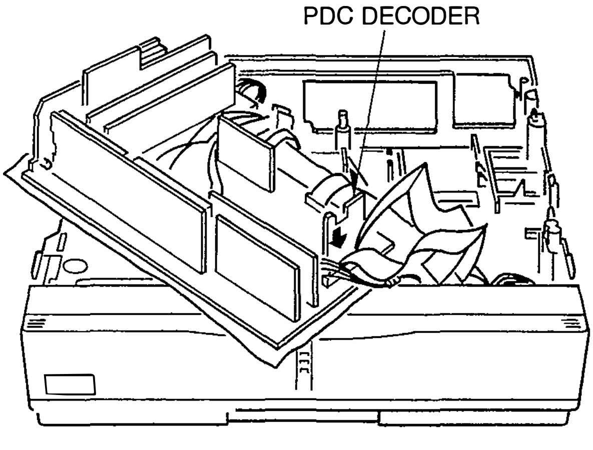

PDC DECODER

Fig. P3

SECTION 1
GENERAL DESCRIPTIONS

1-1. SERVICE INFORMATION

1-1-1. K-MECHANISM INFORMATION

A. SERVICE POSITION

When servicing the K-Mechanism, the Mechanism can easily be fixed by standing the Mechanism up in the Main Frame as shown below to check easily.

In this position, the following services are possible.

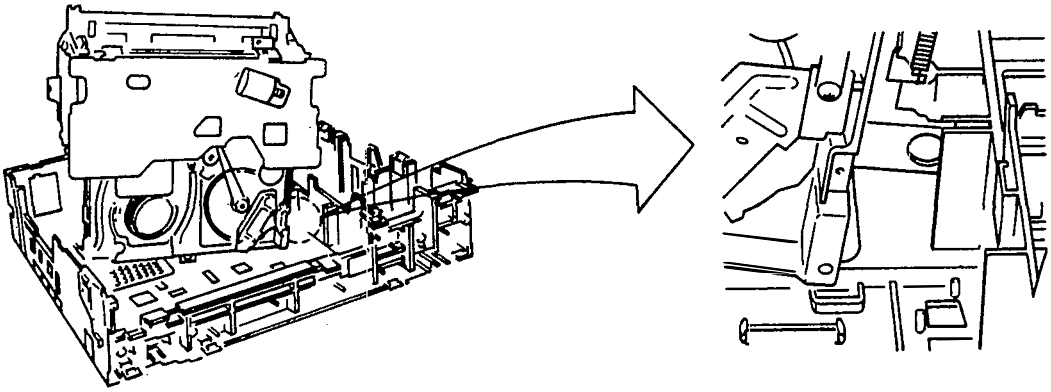


Fig. S1

A-1. CHECKING OF GEAR PHASE ALIGNMENT CONDITION

1) Remove the Mechanism Connection C.B.A.
2) Check gear phase Alignment Condition of Mechanism described on the bottom side of Frame.

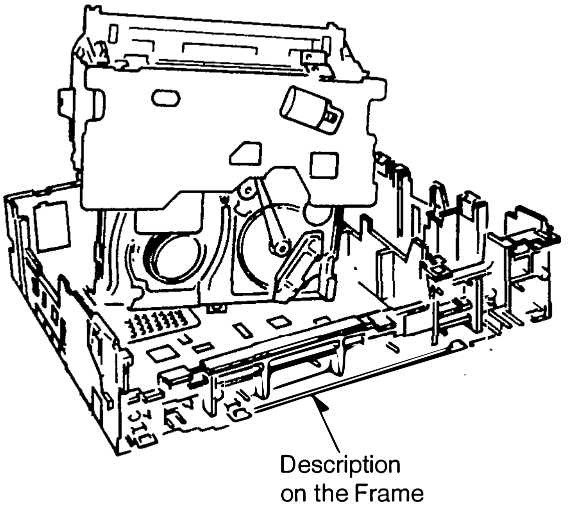


Fig. S2

A-2. CHECKING OF LOADING/UNLOADING OPERATION

There are 3 methods for manual operation of loading/unloading operation as follows.

1. HAND OPERATION
   1) Remove the Mechanism Connection C.B.A.
   2) Turn the Worm Gear or the WORM WHEEL GEAR (Remove the Loading Motor Unit) manually.

2. BATTERY OPERATION
   1) Remove the Mechanism Connection C.B.A.
   2) Connect the Battery (Manganes-Type R6 (AA) 3pcs./+4.5V) to the Loading Motor terminals.

3. SERVICE INFORMATION DISPLAY OPERATION
   1) Set the Service Information Display mode. (Press the "FF", "REW" and "EJECT" buttons simultaneously.)
   2) Press the "FF", "REW" and "EJECT" buttons 7 times to set the Service Mode 7. (The end of display on the Display becomes "--".)
   3) In the above Service Information Display mode, the Loading Motor rotates for Loading operation when the "PLAY" button is pressed.
      The Loading Motor rotates for unloading operation when the "STOP" button is pressed.

Remark:
Use the "SERVICE INFORMATION DISPLAY" mode for a final check of mechanism movement.

A-3. CHECKING OF REEL GEARS OPERATION

1) Remove the Mechanism Connection C.B.A.
2) Move the mechanism to "PLAY" position by loading operation. (Refer to <A-2>)
3) Turn the "Rotor Unit" to check movement of reel gears.

B. CYLINDER UNIT REPLACEMENT

The Cylinder Unit can be replaced easily by the following method.

1) Remove the Top Panel.
2) Remove the 3 screws of the Cylinder Unit with a magnetized screw driver through the holes on the Bottom Plate as shown in Fig. S3.

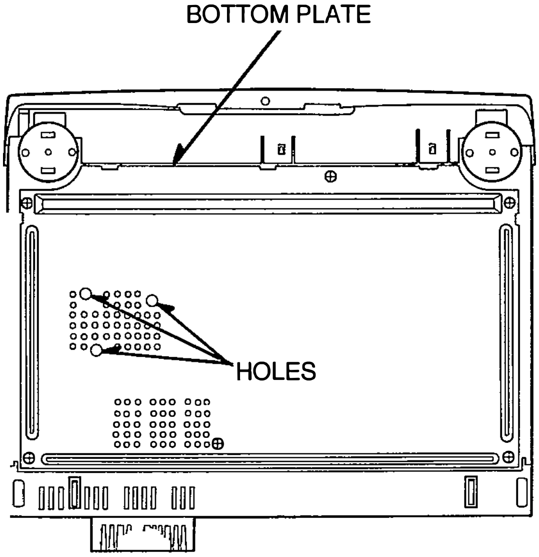

BOTTOM PLATE
HOLES

Fig. S3

C. CAPSTAN STATOR UNIT ASSEMBLY

When replacing the CAPSTAN STATOR UNIT, the CENTRE FIXING TOOL (VFK0851) must be used to fix the centre of CAPSTAN STATOR UNIT.

Method:

1) Place the CAPSTAN STATOR UNIT into position.
2) Loosely tighten the 3 screws.
3) Insert the CENTRE FIXING TOOL (VFK0851) as shown in Fig. S4.
4) Tighten the 3 screws.
5) Remove the CENTRE FIXING TOOL.

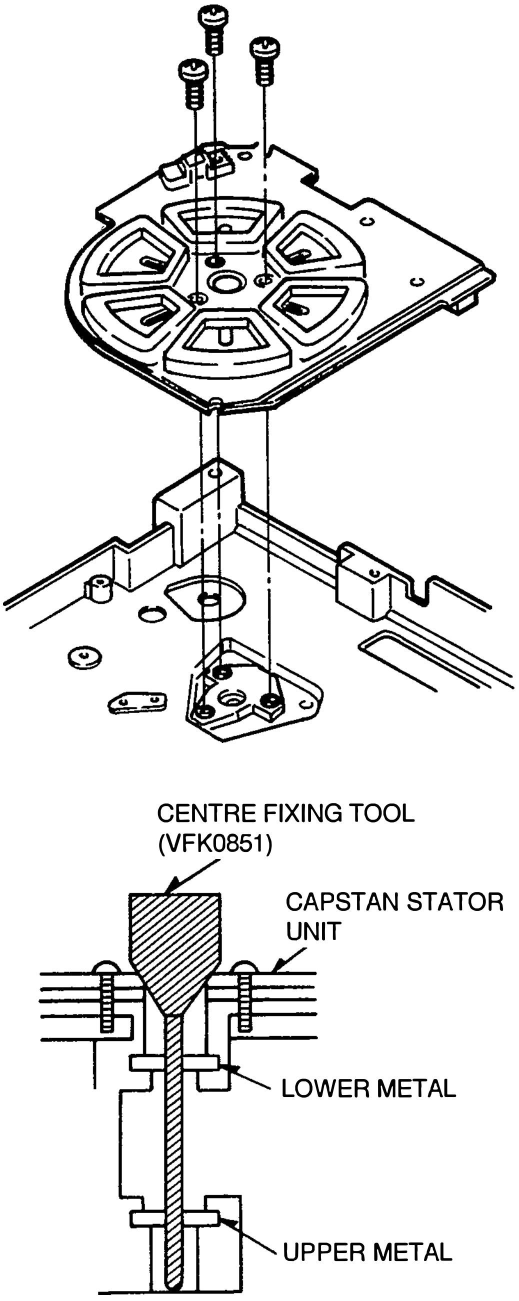

CENTRE FIXING TOOL
(VFK0851)
CAPSTAN STATOR UNIT
LOWER METAL
UPPER METAL

Fig. S4

D. EJECT OPERATION

The main cam gear rotates in the direction of the arrow. The projection (B) of the carriage connection gear engages with the recession (A) of the main cam gear. The carriage connection gear rotates in the direction of the arrow to perform the Eject operation.

<NOTE>
If the Eject operation is performed without the cassette carriage installed while repairing or making the mechanical phase alignment, the main cam gear will not engage with the carriage connection gear and will not rotate.
To perform the Eject operation with the cassette carriage not installed, it is necessary to rotate the carriage connection gear by hand in the direction of the arrow.

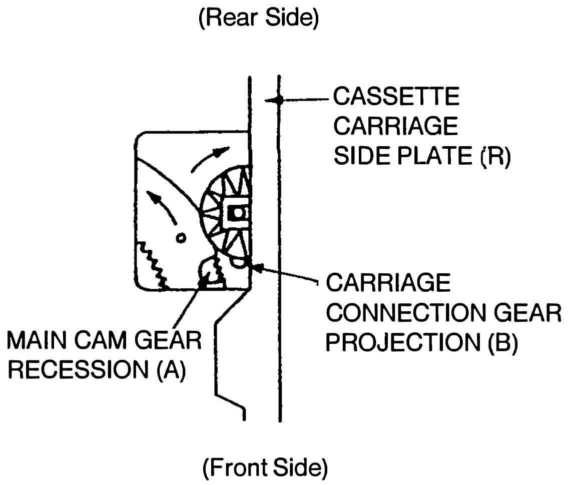


Fig. S5 Top View of Eject Operation

E. TAKE-UP PHOTO SENSOR OPERATION

Note the following matters for Take-up Photo Sensor Operation.

1) While servicing of the K-Mechanism, the unit will not operate properly if a strong light (ex, Fluorescent light, Spot light) falls on the Take-up Photo Sensor. In this case, cover the Take-up Photo Sensor to prevent the light from falling on it.
2) While servicing of the K-Mechanism with "Power On" and without cassette tape inserted, the Unit does not operate properly.

F. POWER TRANSISTOR SERVICING

When removing the connector of the Power Transistor, hold the Power Transistor by hand to prevent damage.

1-1-2. REMOVAL OF THE CASSETTE TAPE

If the electrical circuit is defective and the action of unloading and front unloading do not work properly, it is possible to remove the cassette manually. There are 2 methods of removing the cassette.

1. HAND OPERATION

1) Remove the bottom plate.
2) Turn the WORM GEAR to "A" arrow mark direction manually as shown in Fig. S6, moving the LOADING POST to the unloaded position.
3) Turn the CAPSTAN clockwise to take up the tape.
4) Turn the WORM GEAR again to eject the cassette.

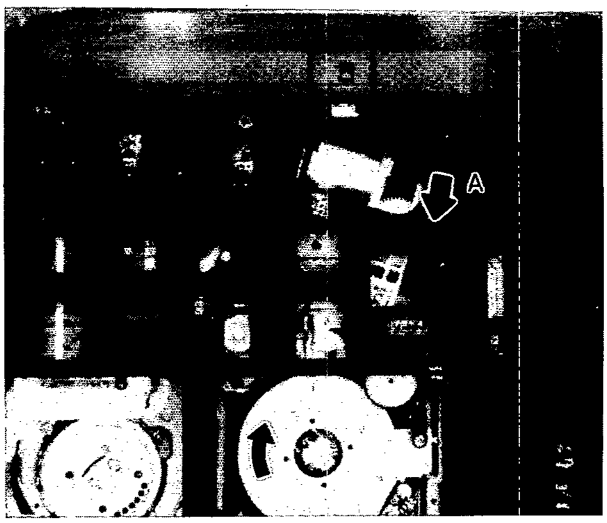


Fig. S6

2. BATTERY OPERATION

1) Connect the Battery (Manganes-Type R6 (AA) 3pcs./ +4.5V) to P1503 as shown in Fig. S7.
2) After moving the LOADING POST to the unloaded position, disconnect the battery to stop the motor.
3) Turn the CAPSTAN to clockwise to take up the tape.
4) Reconnect the battery to eject the cassette.

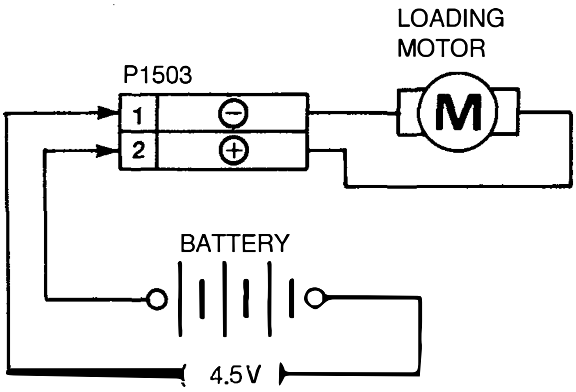


Fig. S7

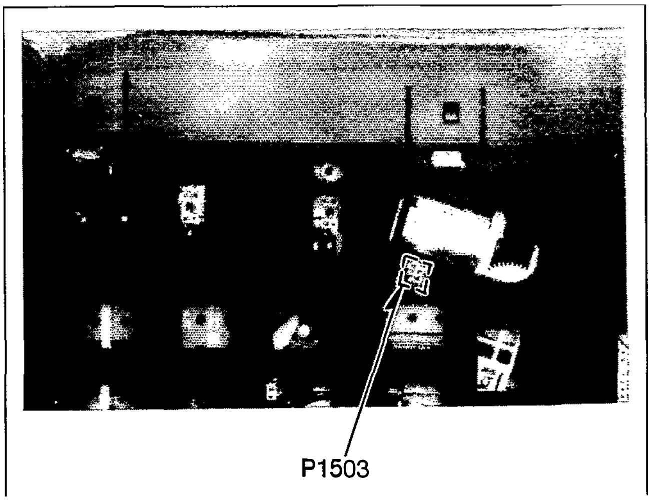


Fig. S8

If the cassette tape can not be removed by the above 2 methods, remove it by the following method.

1) Remove the Top Panel.
2) Remove the Front Panel Unit.
3) Lift up the Pinch Arm after removing spring.
4) Push the P5 Arm and remove the cassette tape from tape transportation (P1, P2, P3 and P5 Posts).
5) Turn the Capstan Motor to take up the tape.
6) Remove 1 screw from the Side Plate (R) Unit to disconnect the Rack Gear from the Carriage Connection Gear.
7) Take out the cassette tape from the Cassette Compart ment.

1-1-3. FLAT CARD CABLE INSTLLATION

When installing the Flat Card Cable on the connector, install the Flat Card Cable with the cable contacts facing the connector contacts.

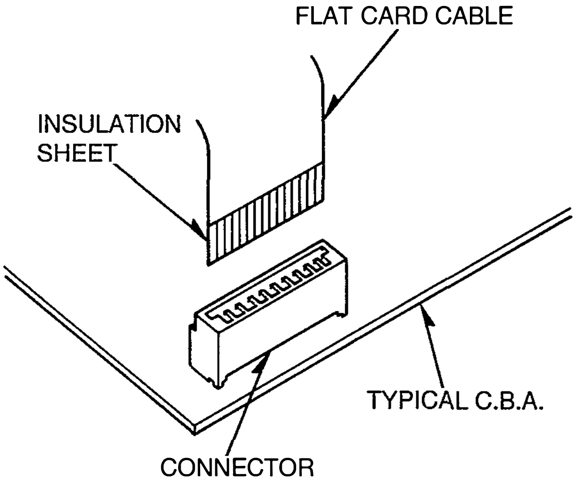


Fig. S9

1-1-4. CHANNEL MEMORY IC INITIALIZATION

When replacing the channel memory IC7503 (XLJ9021B), its IC should be initialized.

Note:1) It should be performed before tuning.
2) Do not turn off the power source during initialization or 1 second after.
3) Meaning of "INITIALIZATION" is to erase the "SKIP CH" In other words the number of channel position is the same as displayed channel.

Method:
1) Press the CH UP/DOWN Button so that the channel indicator indicates "3".
2) Connect a jumper wire between Pin 54 and Pin 35 of IC7501 for more than 1 second.
3) Channel indication changes from "3" to "1".

1-1-5. SERVICING THE PACK C.B.A.

When servicing the CAP Drive Pack C.B.A., Sub Audio Pack C.B.A., Luminance & Chrominance Pack C.B.A., Sub Luminance & Chrominance Pack C.B.A. and TV Demodulator Pack C.B.A., connections of extention cable are necessary as shown below.

PART NO	PART NAME	PCS	CONNECTION
VFK0678	18P EXTENTION CABLE	2	MAIN (PP3011)–SUB L/C (PS3303) MAIN (PP3012)–SUB L/C (PS3302)
VFK0764	10P EXTENTION CABLE	1	MAIN (PP2002)–CAP DRIVE (PS2002)
VFK0918	17P EXTENTION CABLE	1	MAIN (PP4501)–SUB AUDIO (PS4501)
VFK0937	9P EXTENTION CABLE	1	MAIN (PP3001)–L/C (PS301)
VFK0938	12P EXTENTION CABLE	2	MAIN (PP3002)–L/C (PS302) MAIN (PP2001)–CAP DRIVE (PS2001)
VFK0939	13P EXTENTION CABLE	1	MAIN (PP3003)–L/C (PS303)
VFK0940	14P EXTENTION CABLE	1	MAIN (PP3013)–SUB L/C (PS3501)
VFK0944	5P EXTENTION CABLE	3	MAIN (PP7401)–TV DEMODU (PS701) MAIN (PP7402)–TV DEMODU (PS702) MAIN (PP7403)–TV DEMODU (PS703)
VFK0896	6P EXTENTION CABLE	1	MAIN (PP7404)–TV DEMODU (PS704)

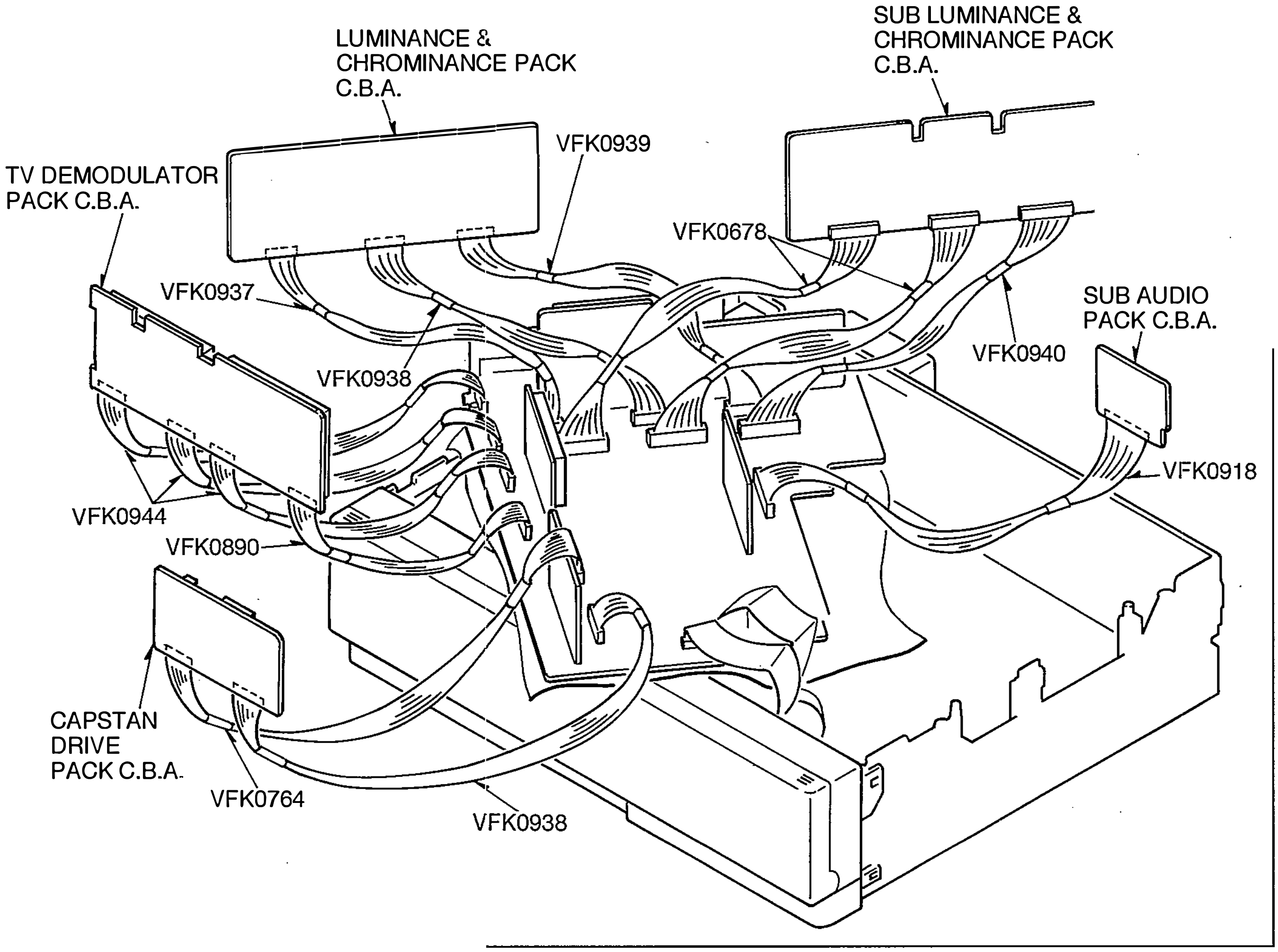

LUMINANCE &
CHROMINANCE PACK
C.B.A.
SUB LUMINANCE &
CHROMINANCE PACK
C.B.A.
TV DEMODULATOR
PACK C.B.A.
VFK0939
VFK0678
VFK0937
VFK0938
VFK0940
SUB AUDIO
PACK C.B.A.
VFK0918
VFK0944
VFK0890
CAPSTAN
DRIVE
PACK C.B.A.
VFK0764
VFK0938

Fig. S10

1-2. SERIAL CLOCK TRANSMISSION ERROR DISPLAY

If the Serial Clock is not transmitted from IC6001 to IC7501, "E9" is displayed as shown in Fig. T1. This indication will be displayed either during the Service Information Display mode or in normal mode.

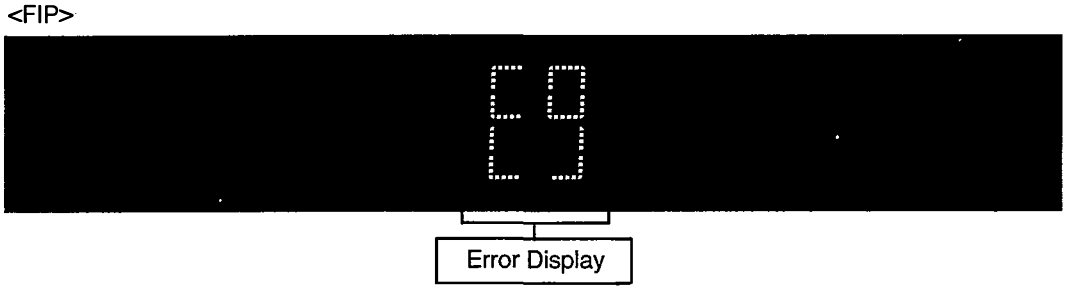

<FIP>
E9
Error Display

Fig. T1 Serial Data/Clock Transmission Error Display

1-3. SERVICE INFORMATION DISPLAY

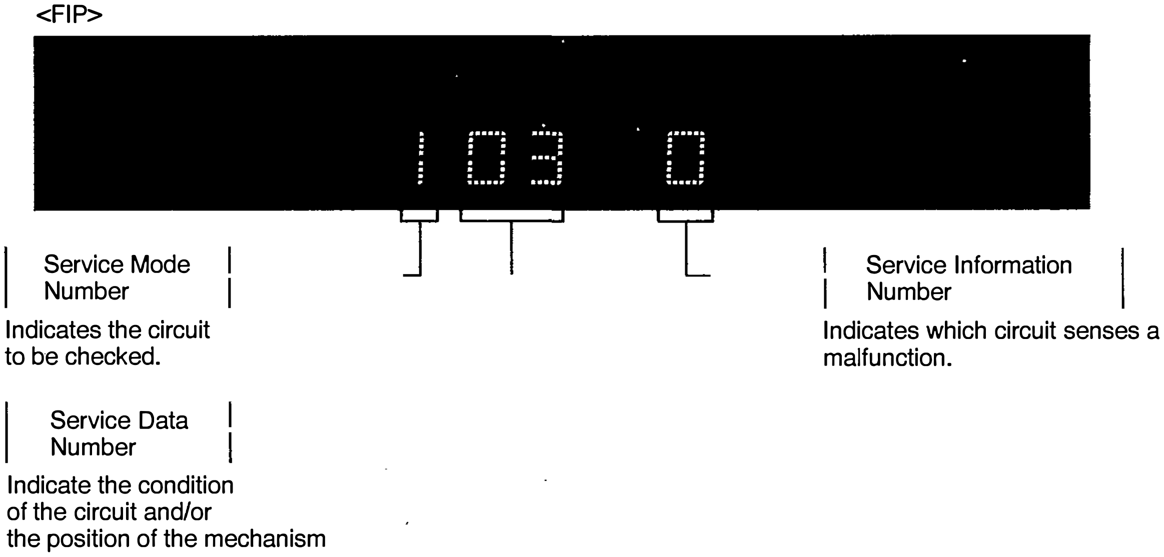

<FIP>
1 03 0
Service Mode Number
Indicates the circuit to be checked.
Service Data Number
Indicate the condition of the circuit and/or the position of the mechanism
Service Information Number
Indicates which circuit senses a malfunction.

Fig. D1 Service Information Display

1-3-1. Purpose of Service Information Display

This information aids trouble shooting by indicating the source of the malfunction. The service mode number & service data number are used by the technician during repair while the service information can be used by the consumer to diagnose malfunctions allowing the technician to provide a more accurate repair cost estimate and reduce repair time.

1-3-2. Turning on Service Information Display

There are two ways to turn on the Service Information Display.

(1) Press the FF, REW and EJECT buttons simultaneously. The Service Information will be displayed for 1 minute.
(2) Connecting a Jumper wire between TP6010 and TP6011 will display the service information indefinitely.

In the Service Information Display, there are four digits divided into 3 functions.
The first digit indicates which of the 7 service modes that the unit is currently in.

MODE 1 : Checks tape protection circuit
MODE 2 : Checks tape transport mechanism
MODE 3 : Checks mode switching operation
MODE 4 : Checks control buttons
MODE 5 : Checks capstan motor
MODE 6 : Checks cylinder motor
MODE 7 : Checks loading/unloading operation

The second and third digits are service data which indicate the condition of the circuit or mechanism being checked.

The forth digit is the service Information display. It is to be used by the consumer to help determine the source of a malfunction. The service information display operates independently of the service modes and stores the fault indication in memory for as long as AC power is supplied.

1-3-3. Use of Service Modes

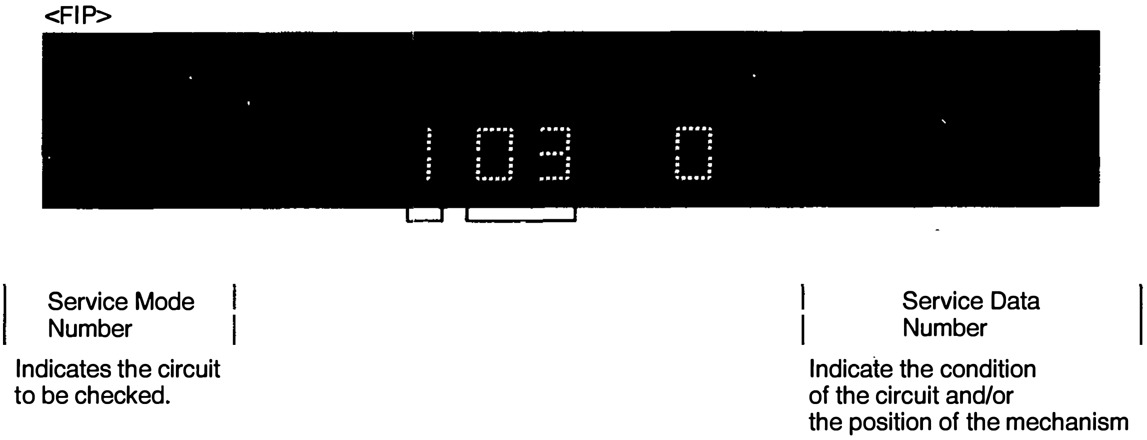

<FIP>
1 0 3 0
Service Mode Number
Indicates the circuit to be checked.
Service Data Number
Indicate the condition of the circuit and/or the position of the mechanism

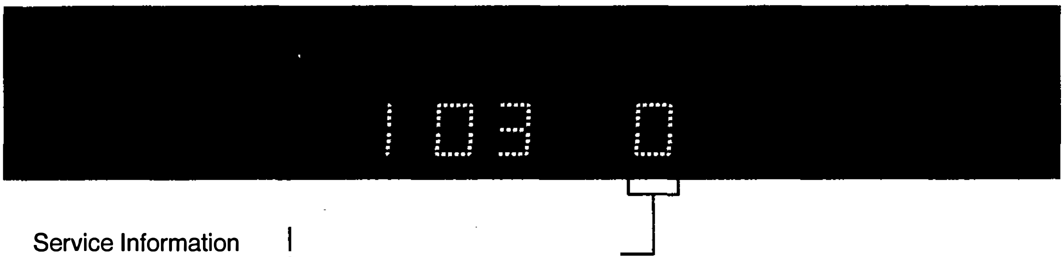
Fig. D2 Service Mode Number and Service Data Number on S.I.D.

(1) Turn on Service Information Display.
(2) To change Service Modes press the FF, REW and EJECT buttons simultaneously.
(3) Mode 1 : Checks that the Sensor LED, Supply & Take-up Sensor circuits check the circuits by blocking the light from the Sensor LED to either or both Supply & Take-up Sensors.
1
When the light is blocked to both sensors, "00" should be indicated on the service data number.
When the light is blocked to the supply sensor, "01" should be indicated.
(4) Mode 2 : Checks the mode switch circuit while indicating mechanism position.
2
Service Data Numbers indicate the position of the mode switch and there by the mechanism position.
(5) Mode 3 : Checks that mode switch circuit operations have been completed.
3
Service Data Number should indicate "00" after each mechanism operation is completed.
(6) Mode 4 : Checks the operation circuit.
4
Indicates if IC6001 receives the operating commands from the mode buttons and/or remote controller.
(7) Mode 5 : Checks the capstan motor circuit.
5
Indicates if the IC6001 has received the command to rotate the capstan motor.
(8) Mode 6 : Checks the cylinder motor circuit.
6
IC6001 has received the command to rotate the cylinder motor.
(9) Mode 7 : Checks the Loading/Unloading Operation.
7
The Loading Motor rotates for loading operation when the "PLAY" button pressed.
The Loading Motor rotates for unloading operation when the "STOP" button is pressed. This mode can be displayed indefinitely until the OPERATE button is pressed.

<NOTE>
Refer to Fig. D5 for details of Service Data Number.

1-3-4. Service Information Number

<FIP>



Service Information Number

Indicates which circuit senses a malfunction.

Fig. D3 Service Information Number on S.I.D.

Refer to Fig. D4 for details of Service Information Number.

Note:
The Service Information Number display is independent of the service mode display.
The Service Information Number will be stored as long as AC power is supplied.
If a second error occurs, only the most recent error will be displayed.

Service Information Number	Malfunction
0	Normal (No problem)
1	Cylinder stop
2	Tape reel stop
3	Stop at position other than 4 or 6
4	Stop during unloading
5	Faulty capstan rotation
6	Stop during Cassette-In/Eject operation

Fig. D4 Service Information

Service mode Number	Note for checking Service Data Numbers	Service Data Numbers	Indication	Remarks
1	—	00	No light detected at either sensor	Tape not required
		01	Tape Begining. Light to Supply Photo Sensor is blocked.	
		02	Tape End. Light to Take-up Photo Sensor is blocked.	
		03	Light detected at both sensors.	
2	—	00	EJECT	Tape Reuired ∗1 : STOP3; The Pinch Roller is on the capstan motor shaft. ∗2 : STOP; The Pinch Roller is off the capstan motor shaft. Refer to Fig. D7 to Check mechanism Position and timing. Note : Supply and Take-up Photo Sensor is inhibited.
		01	Cassette-down	
		02	REV, REV SLOW	
		03	Loading/Unloading	
		04	PLAY/REC, STILL/PAUSE, CUE, FWD SLOW, STOP3 *1	
		05	STOP *2	
		06	FF/REW	
		07	Intermediate position	
3	Disregard service data displayed until mechanism operation is completed. Then the display should indicate "00".	00	Any display other than "00" indicates a fault in the mode switch circuit or system.	Tape Required.
4	Display only when the operating button is pressed.	Refer to Fig. D6		Tape not required.
5	Left digit only, disregard Right digit display.	8 J Left Digital Right Digital	8, 9, u, A, –, n, L, and no display indicate that the Capstan motor "PLAY" command received by IC6001.	Tape required. If a symbol other than those listed is displayed, a malfunction in that circuit is indicated.
	Right digit only, disregard left digit display.	8 7 Left Digital Right Digital	1, 2, 3, 4, 5, 6, 7, indicate that the Capstan motor "CUE, FF, Forward Slow" commands received by IC6001.	
	Right digit only, disregard left digit display.	8 Left Digital Right Digital	8, 9, u, A, –, n, L, and no display indicate that the Capstan motor Reverse, Rew, Reverse Slow commands received by IC6001.	
6	Left digit only, disregard Right digit display.	J 0 Left Digital Right Digital	1, 3, 5, 7, 9, A, n and no display indicate that the cylinder motor "ON" command received by IC6001.	Tape required. If a symbol other than those listed is displayed, a malfunction in that circuit is indicated.

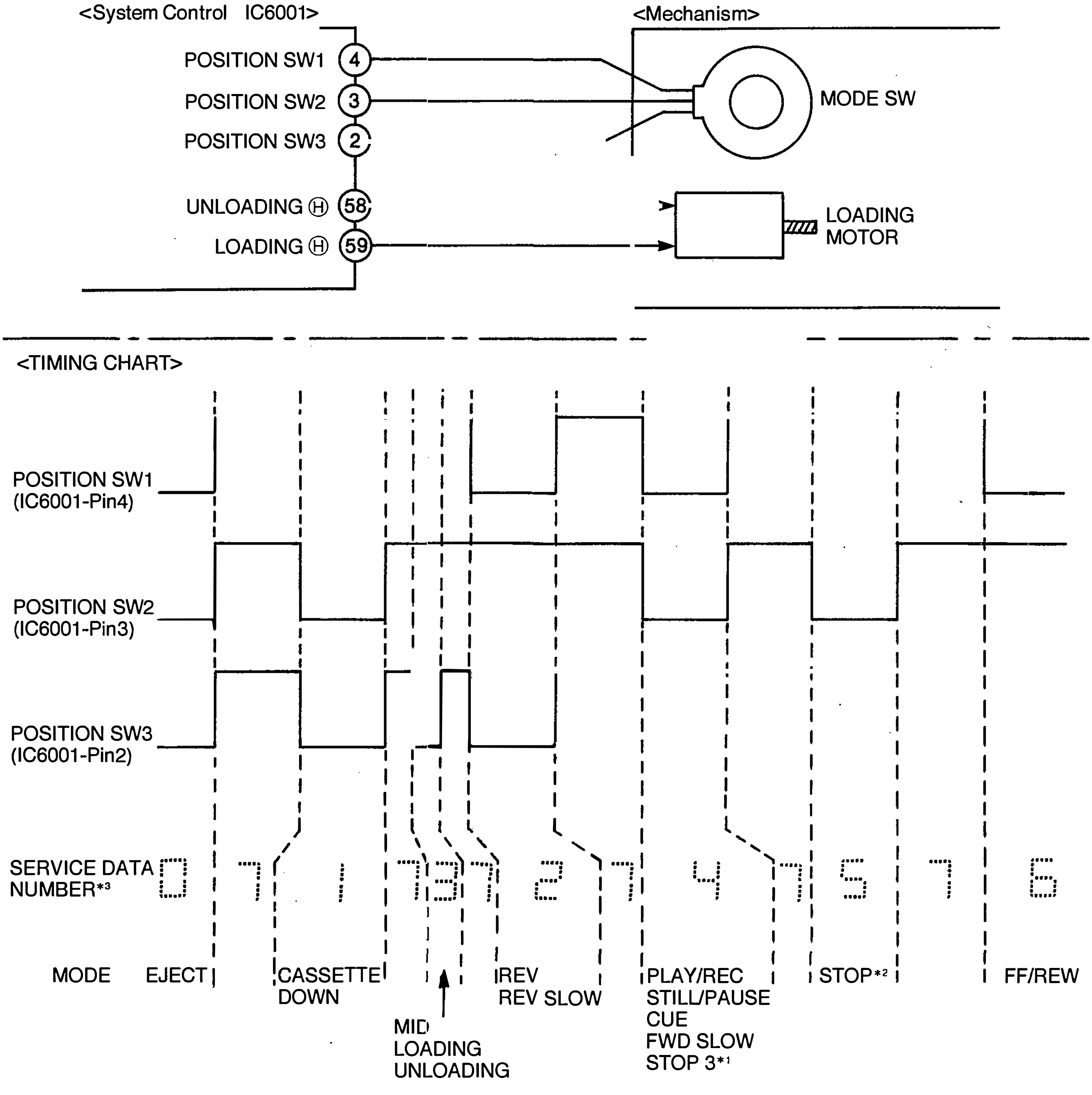
Fig. D5 Service Data Display and Indication

SERVICE DATA NUMBERS	MODE BUTTONS	SERVICE DATA NUMBERS	MODE BUTTONS
3n	OPERATE	—	RESET
01	EJECT	U4	PROG. CLEAR
09	AUDIO DUB	—	ESC
A3	INSERT	49.4U	INDEX (REMOTE CONTROLLER)
-9	PAL/MESECAM	—	TRACKING (+, -)/V-LOCK (REMOTE CONTROLLER)
	CHECK/PROG.	U0	MARK IN
34.35	∧ ∨ (REMOTE CONTROLLER)	U1	MARK OUT
—	NEXT/SP/LP	—	TAPE SELECT (REMOTE CONTROLLER)
—	SLEEP/SHIFT	—	PLAYER
A4	TIMER REC	—	RECORDER
08	REC	—	RECORDING SP/LP (REMOTE CONTROLLER)
—	CLOCK SET	—	CANCEL (REMOTE CONTROLLER)
—	TUNER PRESET	10	SU (1) (REMOTE CONTROLLER)
80	PAUSE/STILL	11	MO (2) (REMOTE CONTROLLER)
0U	PLAY	12	TU (3) (REMOTE CONTROLLER)
00	STOP	13	WE (4) (REMOTE CONTROLLER)
06	PAUSE/STILL (REMOTE CONTROLLER)	14	TH (5) (REMOTE CONTROLLER)
03.02	FF, REW	15	FR (6) (REMOTE CONTROLLER)
U5	EDIT MENU	16	SA (7) (REMOTE CONTROLLER)
—	▲	17	SU~SA (8) (REMOTE CONTROLLER)
—	TRANSMIT (REMOTE CONTROLLER)	18	MO~SA (9) (REMOTE CONTROLLER)
0	SLOW (REMOTE CONTROLLER)	19	MO~FR (0) (REMOTE CONTROLLER)
—	▼	3A	-/-- (REMOTE CONTROLLER)
—	ENTER	—	AUDIO OUT
56	DISPLAY (REMOTE CONTROLLER)	57	OSD (REMOTE CONTROLLER)

Fig. D6 Service Data Display for Service mode 4

1-3-5. Timing Chart from Mode SW to System control IC6001

System control IC6001 senses the mechanism position though the Mode SW.
Fig. D7 shows the timing for Service Mode Number 2.



<System Control IC6001>
POSITION SW1 4
POSITION SW2 3
POSITION SW3 2
UNLOADING Ⓗ 58
LOADING Ⓗ 59
<Mechanism>
MODE SW
LOADING MOTOR
<TIMING CHART>
POSITION SW1 (IC6001-Pin4)
POSITION SW2 (IC6001-Pin3)
POSITION SW3 (IC6001-Pin2)
SERVICE DATA NUMBER*3
0 7 1 7 3 7 2 7 4 7 5 7 6
MODE
EJECT
CASSETTE DOWN
MID LOADING UNLOADING
REV REV SLOW
PLAY/REC STILL/PAUSE CUE FWD SLOW STOP 3*1
STOP*2
FF/REW

*1 : Stop 3; The Pinch Roller is on the capstan motor shaft.

*2 : Stop; The Pinch Roller is off the capstan motor shaft.

*3 : Service Data Number; This is for Service Mode Number 2.

Fig. D7 Timing Chart of Mode SW

1-4. TECHNICAL INFORMATION

1-4-1. EDIT CONTROLLER FUNCTION

This VCR is equipped with programme editing.
If connected via edit cable to another VCR or a movie camera, it is possible to control such functions as tape playback and editing.

(1) Connecting this VCR with another identical one.

1) Connect the two VCRs with 5-pin edit cable.
2) Connect the AV1 socket on the playback VCR to the AV2 socket on the recording VCR.
3) Connect the AV1 socket on the recording VCR to the TV.
4) Select A2 by pressing "Λ"V" or INPUT SELECT on the recording VCR.
5) Set EDIT MODE to Passive on the playback VCR, and to RECORDER on the recording VCR.
6) Control is performed by the recording VCR.

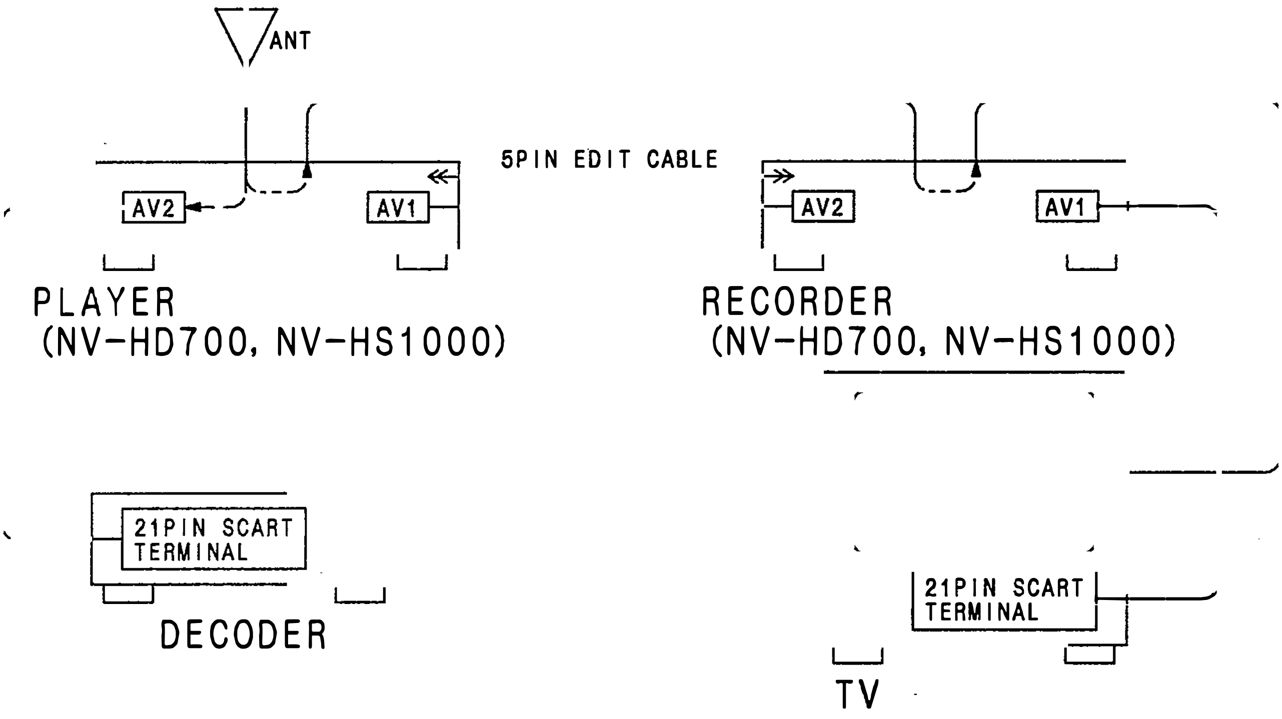

ANT
5PIN EDIT CABLE
AV2
AV1
AV2
AV1
PLAYER
(NV-HD700, NV-HS1000)
RECORDER
(NV-HD700, NV-HS1000)
21PIN SCART TERMINAL
DECODER
21PIN SCART TERMINAL
TV

Fig. A1 Connection of Editing Controller Function

1-4-2. AI (ARTIFICAL INTELLIGENCE) RECORDING FUNCTION

The recording and playback are adjusted to achieve optimum picture quality from tapes with varying charactristics.

(1) Detail explanation

<Playback mode>

The picture quality is varying from the different tapes as follows:

1) If the output level is low, from worn or rental cassette tapes, a soft picture is obtained by the RF equlizer and picture control on the Lumi./Chro. Pack C.B.A.
2) If the output level is medium, from normal tapes, a sharp picture is obtained from the emphasis and picture control on the Lumi./Chro. Pack C.B.A.
3) If the output level is high, from HG/S tapes, a sharp and detailed picture is obtained from the RF equlizer, emphasis picture control and noise canceller on the Lumi./Chro. Pack C.B.A.

<Recording mode>

The optimum recording level is used for all head conditions and for all types of tapes.

1) The luminance S/N is boosted 2dB.
2) Recording head wear compensation.
3) The optimum recording current is achieved in 1.5 seconds.

(2) Signal Flow

<Playback mode>

1) When the AI is turned on, the AI TRIG (H) signal is supplied to IC3403 from pin 122 of IC6001. The AI CNT (H) is supplied to the Lumi./Chro. Pack C.B.A., IC6001 and the Erase Current Generator circuit.
2) The RF C signal from the Head Amp C.B.A. is used by the IC3403 to detect the output level of the video head.
3) After receiving the RF C signal, the IC3403 supplies ENVE1 and ENVE2 to the Lumi./Chro. Pack as shown in Fig. A1.
4) The optimum picture is output from the video circuit.

<Recording mode>

1) When the AI is turned on, the AI TRIG (H) signal is supplied to IC3403 from pin 122 of IC6001. The AI CNT (H) is supplied to the Lumi./Chro. Pack C.B.A., IC6001 and the Erase Current Generator circuit.
2) Before recording, the recording and playback operations are done in the still mode to determine the optimum recording current. The signal level detection is the same as the playback mode operation. The recording current is set by the REC CUR1, 2, 3 signals from IC3403. IC3405 is used for erasing the tape in the still mode.

<Others>

The NTSC (L) signal is used for setting the system to NTSC or PAL.

Other command signals are used to control the performance timing.

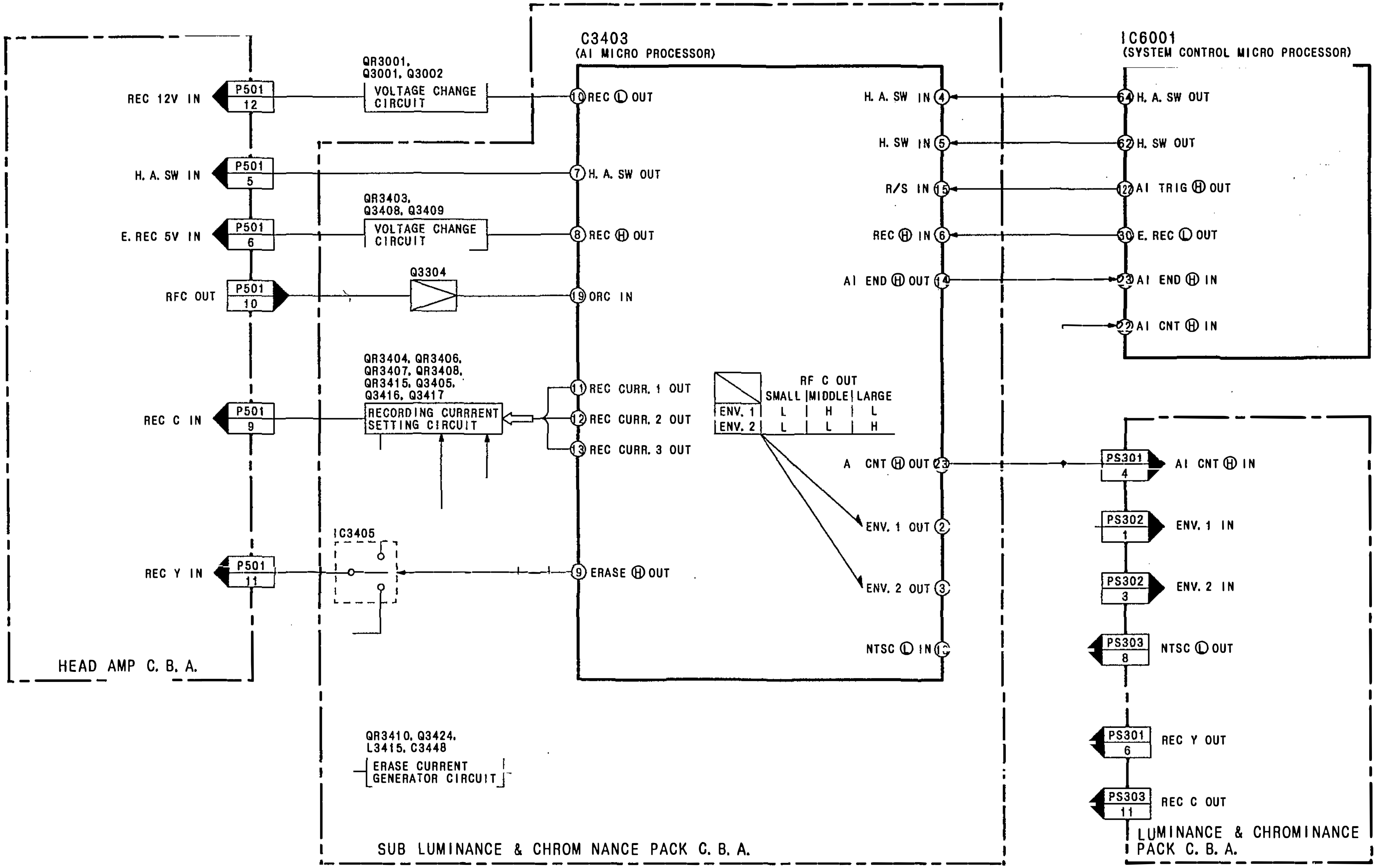

HEAD AMP C. B. A.
REC 12V IN
P501 12
H. A. SW IN
P501 5
E. REC 5V IN
P501 6
RFC OUT
P501 10
REC C IN
P501 9
REC Y IN
P501 11
QR3001, Q3001, Q3002
VOLTAGE CHANGE CIRCUIT
QR3403, Q3408, Q3409
VOLTAGE CHANGE CIRCUIT
Q3304
QR3404, QR3406, QR3407, QR3408, QR3415, Q3405, Q3416, Q3417
RECORDING CURRRENT SETTING CIRCUIT
IC3405
QR3410, Q3424, L3415, C3448
ERASE CURRENT GENERATOR CIRCUIT
SUB LUMINANCE & CHROMINANCE PACK C. B. A.
C3403
(AI MICRO PROCESSOR)
10 REC Ⓛ OUT
7 H. A. SW OUT
8 REC Ⓗ OUT
19 ORC IN
11 REC CURR. 1 OUT
12 REC CURR. 2 OUT
13 REC CURR. 3 OUT
9 ERASE Ⓗ OUT
H. A. SW IN 4
H. SW IN 5
R/S IN 15
REC Ⓗ IN 6
AI END Ⓗ OUT 14
A CNT Ⓗ OUT 23
ENV. 1 OUT 2
ENV. 2 OUT 3
NTSC Ⓛ IN 1
RF C OUT
SMALL | MIDDLE | LARGE
ENV. 1 | L | H | L
ENV. 2 | L | L | H
IC6001
(SYSTEM CONTROL MICRO PROCESSOR)
64 H. A. SW OUT
62 H. SW OUT
22 AI TRIG Ⓗ OUT
30 E. REC Ⓛ OUT
23 AI END Ⓗ IN
22 AI CNT Ⓗ IN
PS301 4
AI CNT Ⓗ IN
PS302 1
ENV. 1 IN
PS302 3
ENV. 2 IN
PS303 8
NTSC Ⓛ OUT
PS301 6
REC Y OUT
PS303 11
REC C OUT
LUMINANCE & CHROMINANCE PACK C. B. A.

Fig. A2 Simplified AI Function Block Diagram

(2) Signal Flow

Fig. A3 below describes Video/Audio signa flow.
The control commands go from Recorder to Player
through 5-Pin Edit Cable.

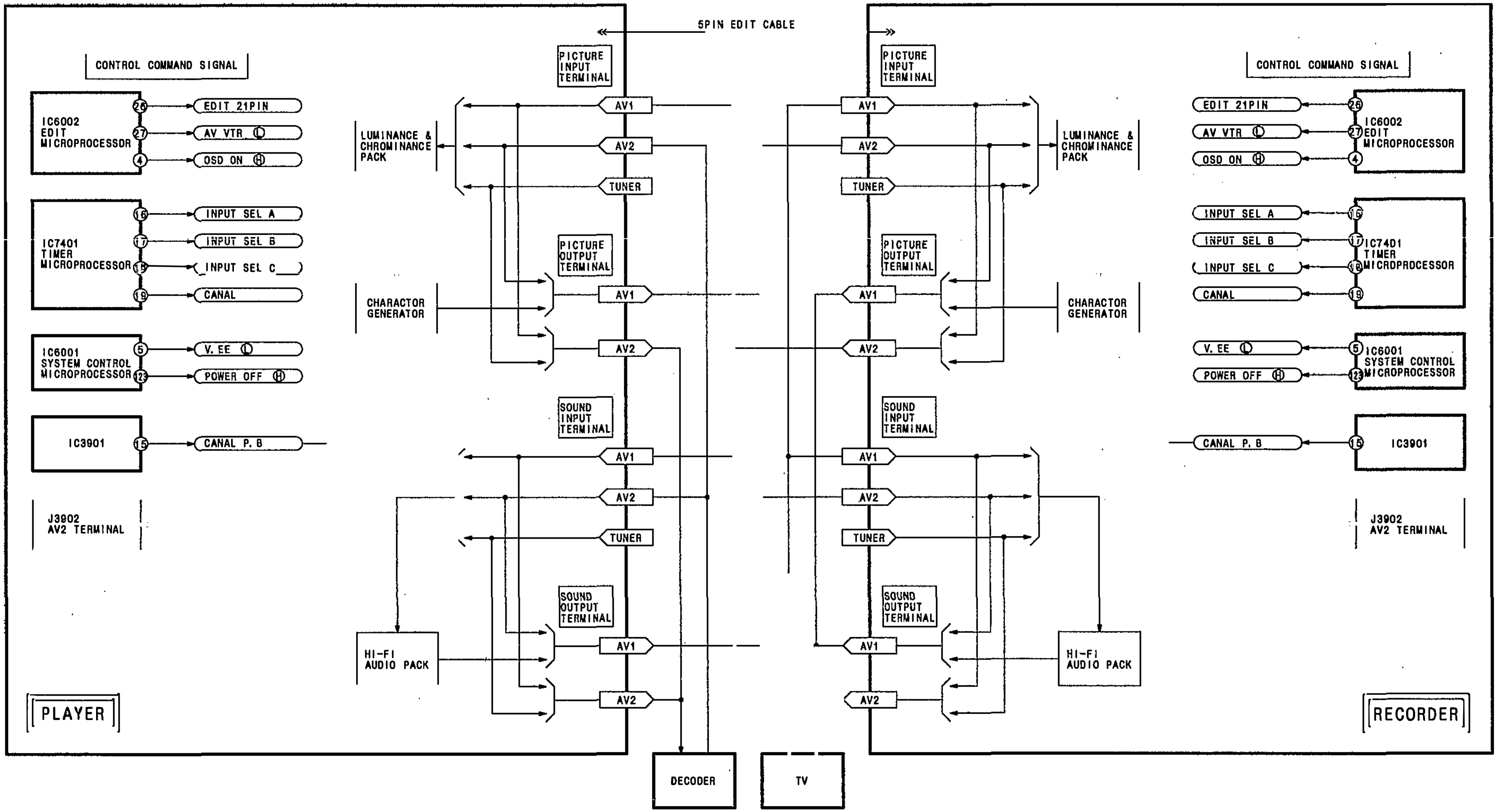

5PIN EDIT CABLE
CONTROL COMMAND SIGNAL
IC6002 EDIT MICROPROCESSOR
26
27
4
EDIT 21PIN
AV VTR Ⓛ
OSD ON Ⓗ
IC7401 TIMER MICROPROCESSOR
16
17
18
19
INPUT SEL A
INPUT SEL B
INPUT SEL C
CANAL
IC6001 SYSTEM CONTROL MICROPROCESSOR
5
23
V. EE Ⓛ
POWER OFF Ⓗ
IC3901
15
CANAL P. B
J3902 AV2 TERMINAL
PLAYER
LUMINANCE & CHROMINANCE PACK
CHARACTOR GENERATOR
HI-FI AUDIO PACK
PICTURE INPUT TERMINAL
PICTURE OUTPUT TERMINAL
SOUND INPUT TERMINAL
SOUND OUTPUT TERMINAL
AV1
AV2
TUNER
DECODER
TV
IC74D1 TIMER MICROPROCESSOR
RECORDER

Fig. A3 Signa Flow

(3) Input/Output Chart for Edit IC6002 (M38024V1BK)

Pin Number	Input/Output	Port Name	Function
1	O	OSD CLK	Character Generator Control Clock
2	O	OSD DATA	Character Generator Control Data
3	O	OSD CS	Character Generator Control Chip Select (L)
4	O	OSD ON (H)	Editing OSD ON (H)
5, 6	-	----------	Not used
7	I	L CLK CNT	Serial Clock Counter Terminal
8	-	----------	Not used
9	I	SYS CLK	System Control Serial Clock
10	O	SYS OUT	System Control Serial Data
11	I	SYS IN	System Control Serial Data
12	O	DATA INH	5P Clock Data Output Inhibit (H)
13	I	CLK INPUT	Timer/5P/Serial Clock
14	O	DATA OUT	5P/Serial Data
15	I	DATA IN	5P/Serial Data
16, 17	-	----------	Not used
18	-	GND	GND
19	I	RESET (L)	Reset by Low signal
20	I	L CLK	Serial Data timing detection
21	I	5P CLK	5P Clock detection
22	I	OSC IN	7.37MHz OSC
23	O	OSC OUT	7.37MHz OSC
24	-	GND	GND
25	O	JOG LED (H)	JOG/SHUTTLE Mode ON (H)
26	O	EDIT21P	AV2 Terminal Output (H) in the Editing OSD mode
27	O	AVVTR (L)	AV2 Terminal Output (H) in the Editing OSD mode
28	O	TBC SEARCH (L)	CUE/REV Detection in TBC mode
29	O	TBC TRICK (L)	PLAY Detection in TBC mode

Pin Number	Input/Output	Port Name	Function
30	O	TBC ON (L)	TBC ON (L)
31	-	----------	Not used
32	O	EDIT (H)	Picture Edit mode (H)
33	I	TEST SIGNAL (H)	Tuner Preset Display ON (H)
34	I	OSD SECAM (H)	OSD ON (H) by SECAM System
35	O	INSIDE (H)	Internal OSD ON (H)
36	I	SEARCH MUTE OK (H)	Sound Serch Mute (H)
37	I	VITC OK (H)	VITC ON (H)
38	I	LANGUAGE2	<OSD Langage Setting> 000 = English, 001 = German 010 = French, 011 = Italian 100 = Spanish, 101 = Dutch 110 = Swedish
39	I	LANGUAGE1	
40	I	LANGUAGE0	
41 ~ 46	-	----------	Not used
47	O	BUS SELECT (B)	Timer/5P/Serial Bus Selection
48	O	BUS SELECT (A)	Timer/5P/Serial Bus Selection
49	I	CHECK (L)	Factory mode (L)
50 ~ 56	-	----------	Not used
57, 58	I	VDD	5V
59	-	GND	GND
60	I	EE DATA IN	Data from IC6007 (EEPROM)
61	O	EE DATA OUT	Data to IC6007 (EEPROM)
62	O	EE CLK	Clock to IC6007 (EEPROM)
63	O	EE CS	Chip Select to IC6007 (EEPROM)
64	I	REC/P1/P2	Recorder (H)/Player1 (M)/Player2 (L)

1-4-3. NEW SERIAL DATA TRANSMISSION

1. Serial data transmission

To exchange the data among the microprocessors, the serial data transmission is used.

Serial data transmission is used because of the relatively large amount of information that can be sent in a signal data line.

Actually two lines are required in this system, an in/out data line and a clock line.

The data in/out line between each microprocessor is timeshared.

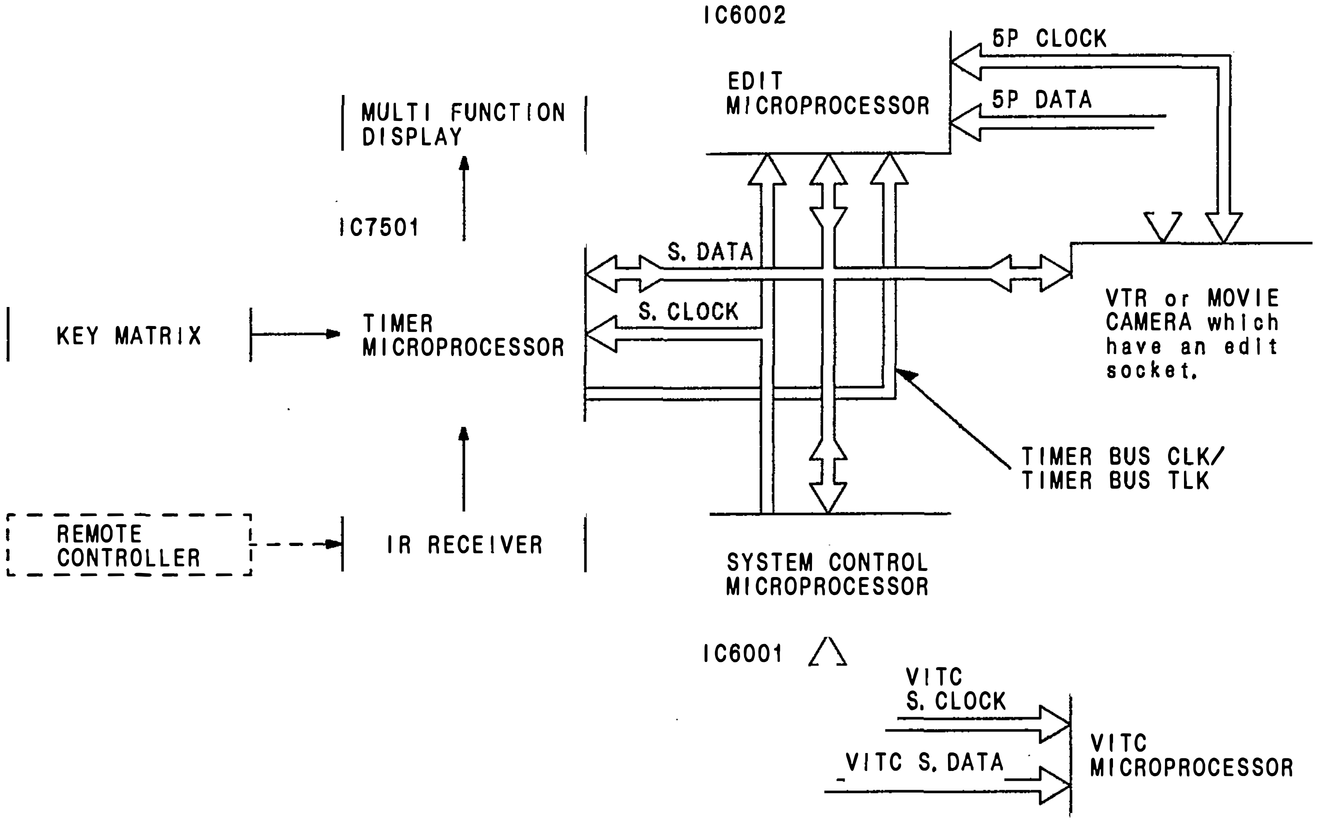

IC6002
EDIT MICROPROCESSOR
5P CLOCK
5P DATA
MULTI FUNCTION DISPLAY
IC7501
S. DATA
S. CLOCK
KEY MATRIX
TIMER MICROPROCESSOR
VTR or MOVIE CAMERA which have an edit socket.
TIMER BUS CLK/
TIMER BUS TLK
REMOTE CONTROLLER
IR RECEIVER
SYSTEM CONTROL MICROPROCESSOR
IC6001
VITC S. CLOCK
VITC S. DATA
VITC MICROPROCESSOR

Fig. A4

2. Serial clock line and data line

This serial clock signal is a reference signal which is used to control the timing of the data transmission among the microprocessors.

The previous transmission has only 13 clocknumber, the new serial data transmission has 20 clock number in it.

Blocks 1 to 10 of both formats will be the same.

Now the clock number from 1 to 13 is same.

The contents of new data is as shown below.

S. Clock is used for transmission of the data among the system control microprocessor, timer microprocessor and edit microprocessor.

And 5P Clock which is composed of the clock no. 1, 3, 4, 5, 7, 8, 9 works to transmit the data between the edit microprocessor and the VTR or MOVIE CAMERA which has an edit socket.

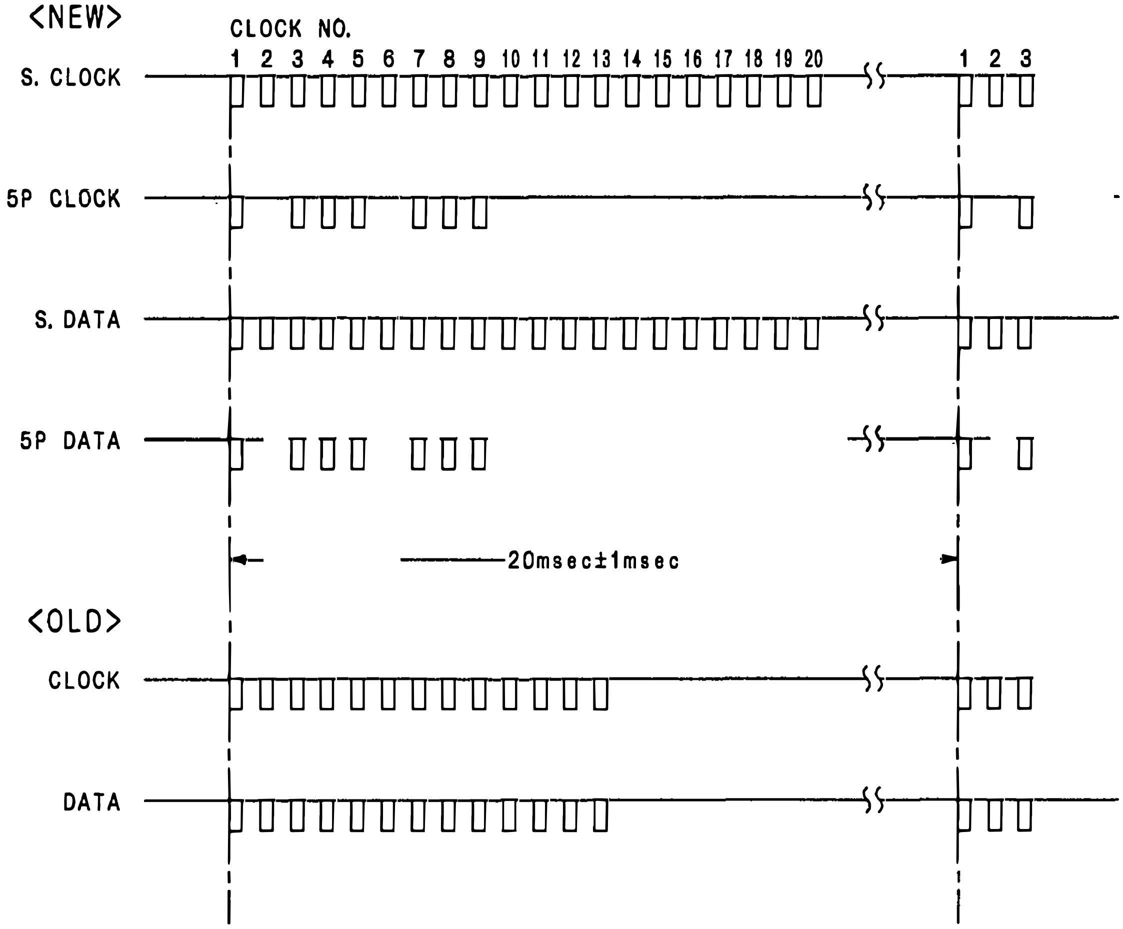

<NEW>
CLOCK NO.
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20
1 2 3
S. CLOCK
5P CLOCK
S. DATA
5P DATA
20msec±1msec
<OLD>
CLOCK
DATA

Fig. A5

CLOCK NO	TRANSMISSION	CONTENTS OF DATA	CLOCK NO	TRANSMISSION	CONTENTS OF DATA
1	IC7501 ← IC6001	TAPE SPEED M/R/S etc.	11	IC7501 ← IC6001	SEARCH MODE CONDITION CODE
2	IC6001 ← IC7501	WIRELESS REMOTE AND KEY CONTROL CODE	12	IC7501 ← IC6001	FRAME NUMBER CODE
3	IC6001 ← IC7501	TIMER INSTRUCTIONS CODE	13	NOT USED	———
4	IC6001 ← EDIT CONTROLLER	EDIT CONTROLLER INSTRUCTIONS CODE	14	IC6001 ← IC7501	JOG/SHUTTLE CODE
5	IC7501 ← IC6001	TRANSMISSION OF VTR MODE CODE	15	IC6001 ← IC7501	AI SWITCH CONDITION
6	IC7501 ← IC6001	DISPLAY INDICATION CODE (POWER ON/OFF etc.)	16	IC6001 ← IC7501	AUDIO CONDITION CODE
7	IC7501 ← IC6001	COUNTER/TAPE REMAINING CODE	17	IC7501 ← IC6001	PLAY BACK BILINGUAL CONDITION CODE
8	IC7501 ← IC6001	COUNTER/TAPE REMAINING CODE	18	IC6002 ← IC6001	VITC CODE
9	IC7501 ← IC6001	COUNTER/TAPE REMAINING CODE	19	IC6001 ← IC6002	EDIT MICROPROCESSOR INSTRUCTION CODE
10	IC6001 ← IC7501	TIMER CONDITION CODE	20	NOT USED	———

Fig. A6

1-5. OPERATING INSTRUCTIONS

Precautions

Please read these cautions before you operate this VTR.

Avoid Sudden Changes in Temperature

If the VTR is suddenly moved from a cold place to a warm place, moisture may form on the tape and inside the VTR.

Humidity and Dust

Avoid places where there is high humidity or much dust, which may cause damage to internal parts.

Do Not Obstruct the Ventilation Holes

The ventilation holes prevent abnormal increase in temperature. Do not block or cover these holes. Especially avoid covering the holes with soft materials such as cloth or paper.

Keep away from High Temperature

Keep the VTR away from extreme direct heat such as direct sunlight, heating radiators, or closed automobiles.

Keep Magnets away

Never bring a magnet or magnetized object near the VTR because it will adversely affect the performance of the VTR.

No Fingers or Other Objects Inside

Touching internal parts of this VTR is dangerous, and may cause serious damage to the VTR. Do not attempt to disassemble the VTR. There are no user serviceable parts inside.

Keep Water away

Keep the VTR away from flower vases, tubs, sinks, etc. CAUTION: If liquids are spilled into the VTR, serious damage could occur. If you spill any liquid into the VTR, consult qualified service personnel.

Lightning

To avoid damage by lightning, disconnect the aerial plug from the VTR.

Cleaning the VTR

Wipe the VTR with a clean, dry cloth. Never use cleaning fluid, or other chemicals. And do not use compressed air to remove dust.

Stacking

Place the VTR in a horizontal position, and do not place anything heavy on it.

Video Head Clogging

The video heads place picture signals on the tape during recording and read picture signals from the tape during playback and they are, therefore, of critical importance for the picture quality. If the VTR is used over extremely long periods of time, these heads may still become dirty and clogged. In such a case, the signals can no longer be recorded correctly, and the playback picture will be distorted accordingly. This is the case, for example, during the playback of a tape, the sound is reproduced normally, but no picture is seen, or the picture is greatly distorted. When such a symptom case occurs have the recorder checked by qualified service personnel.

Condensation may form in the VTR if:

- The VTR is in a room when the heater has just been turned on.
- The VTR is in a room with steam or high humidity.
- The VTR is brought from cold surroundings into a well-heated room.
- The VTR is suddenly brought from cool surroundings, such as an air-conditioned room or car, to a place which is hot and humid.

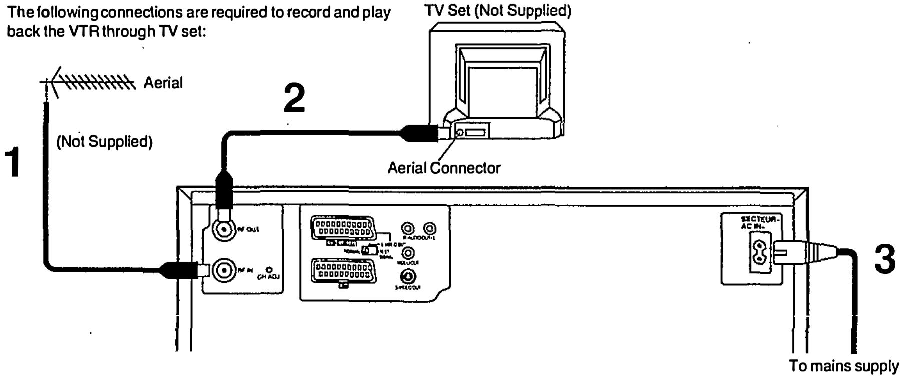
Note:
Do not operate the VTR for at least 1 hour if any of the above conditions occur.
This VTR does not incorporate a dew sensor.

Connections

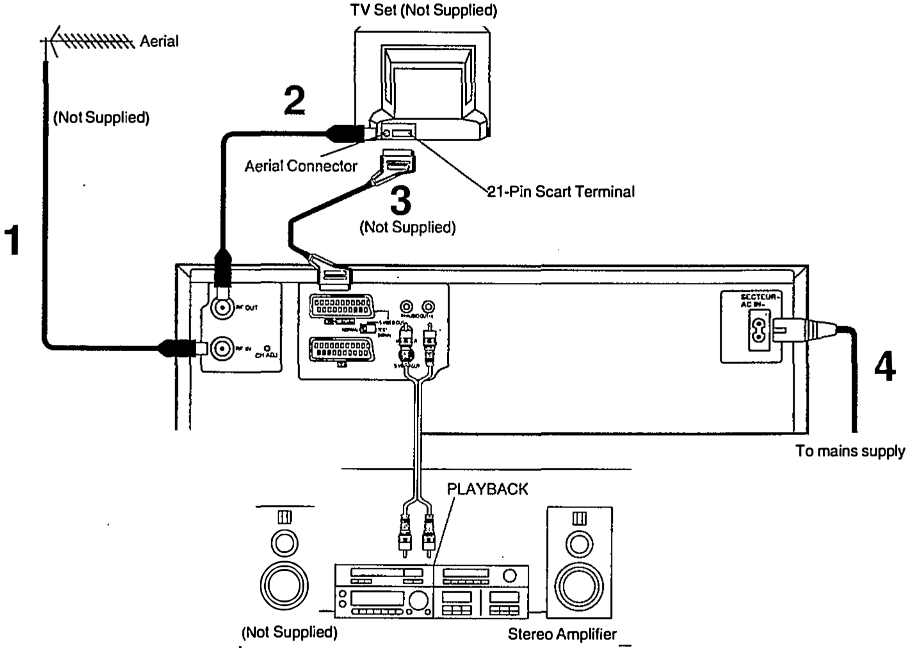
This tells you how to connect with an aerial, TV, etc.

Basic Connections

The following connections are required to record and play back the VTR through TV set:



Connection to a TV Set with 21-Pin Scart Terminal



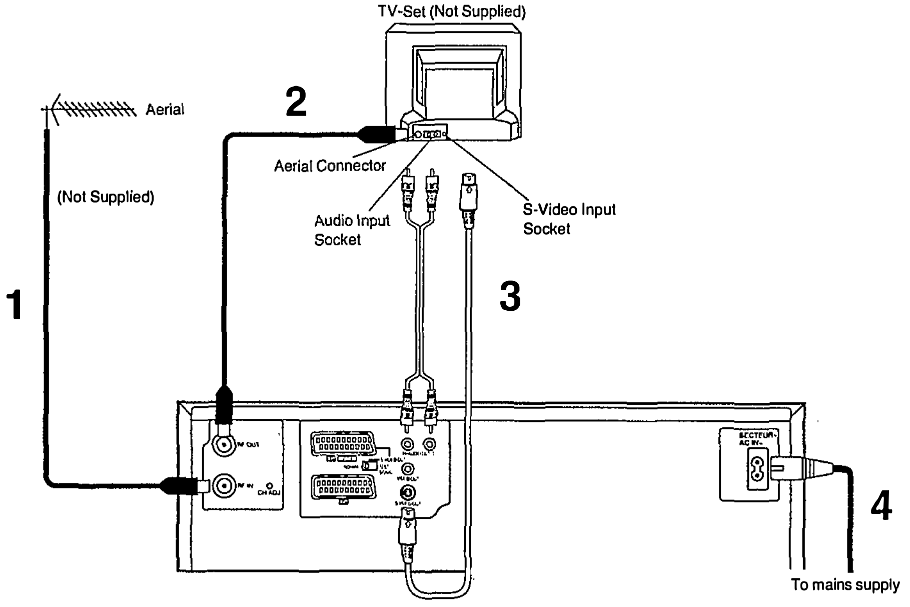
•Connection to a Stereo Amplifier

Connection to a TV Set with S-Video Socket

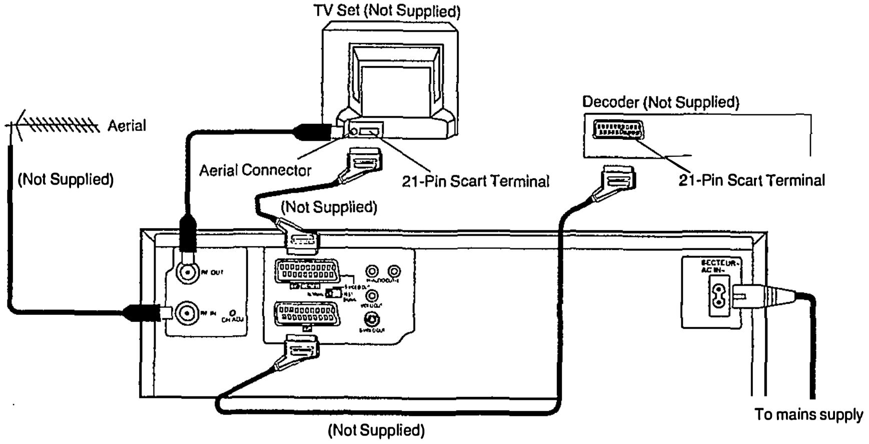
This VTR uses the S-VHS format that makes it possible to obtain high resolution and high picture quality by using the high-performance S-VHS videocassette tapes.

The conventional video sockets of VTRs output (input) a combination of the luminance signal (Y) and colour signal (C) which are recorded on the video tape. The new S (Separate)-Video Socket allows separate transmission of signals in order to obtain clearer pictures.

The connection with the S-Video Cable can also be used for playback of a tape that was recorded in the conventional VHS system. The "S" in the "S-Video Socket" stands for "SEPARATED Y/C" not for "S-VHS".


TV-Set (Not Supplied)
Aerial
2
(Not Supplied)
Aerial Connector
Audio Input Socket
S-Video Input Socket
1
3
4
To mains supply

Connection to a Decoder


TV Set (Not Supplied)
Decoder (Not Supplied)
Aerial
(Not Supplied)
Aerial Connector
21-Pin Scart Terminal
21-Pin Scart Terminal
(Not Supplied)
To mains supply
(Not Supplied)

Note:
If the TV set is provided with an RGB-compatible connector connect the 21-pin AV cable from the VTR to this connector. Use full-pin 21-pin AV cables for connecting the TV set and VTR and for connecting the VTR and decoder.

AV LINK

With this button the connected colour TV set can be switched from TV mode to VTR mode (vice versa) when it is connected by means of 21-pin scart cable.

This makes a variety of functions possible, such as simultaneous recording and viewing when a Pay TV (e.g. Canal Plus, Filmnet) decoder or a satellite receiver has been connected.

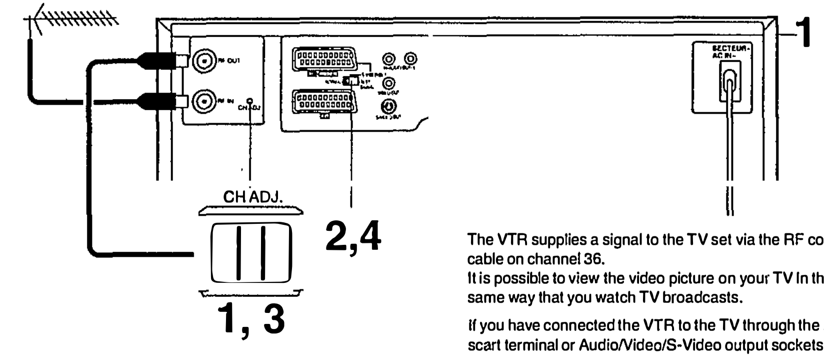
VTR mode (VTR indicator lights):
To enjoy sound and pictures from the VTR.

TV mode (VTR indicator goes off):
To watch another programme on the TV while recording on the VTR.
- Select the programme to be watched using the TV set's tuner.
- The sound and pictures of a different channel are received by the VTR.

	VTR	TV set
Power On	VTR mode	AV input selected
	TV mode	Input from TV set's tuner*
Power Off	—	Input from TV set's tuner

*When the VTR is set to the TV mode and the Pay TV channel is selected, the signals will still be scrambled even when Pay TV is selected by the TV set's tuner. At a time like this, either set the VTR to the VTR mode or switch the TV set's input signals to AV input.

Tuning the TV to your VTR



The VTR supplies a signal to the TV set via the RF coaxial cable on channel 36.
It is possible to view the video picture on your TV in the same way that you watch TV broadcasts.

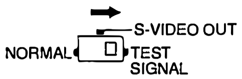
If you have connected the VTR to the TV through the 21-pin scart terminal or Audio/Video/S-Video output sockets then you do not need to follow the procedure mentioned below.

Operations

1

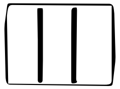
Turn on the TV and VTR.

2



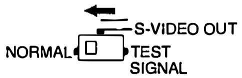
To generate a test pattern, set **NORMAL/ S-VIDEO OUT/TEST SIGNAL** to TEST SIGNAL.

3



Set the TV to an unused position which you wish to use for your video playback.

4



Set **NORMAL/S-VIDEO OUT/TEST SIGNAL** to NORMAL.

Note;
The test signal is transmitted on video channel 36. If you are encountering interference from a TV broadcast on this video channel, you may readjust to another free channel (32~40) by using the **CH ADJ.** screw which is located on the rear of the VTR. When rotating the **CH ADJ.** screw, take care not to turn it too far.
Please note that if the **CH ADJ.** screw is used then you will have to retune your TV to the test signal as in item 2 to 4 above.

Setting the Clock of the VTR

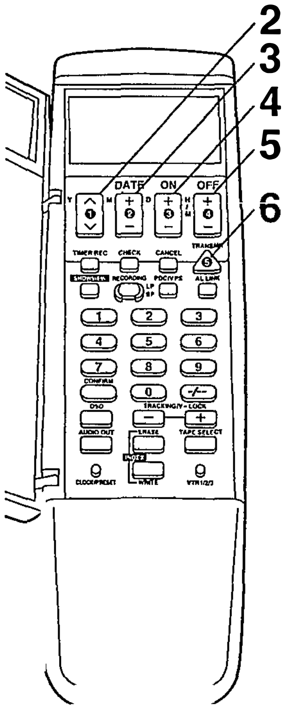
By setting the time on the remote controller's clock and then by transmitting this setting to the VTR, the clocks on both the remote controller and VTR display the same time.
The built-in digital clock employs the 24-hour system.

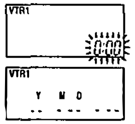
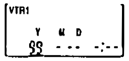
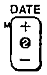
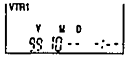
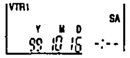
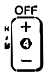
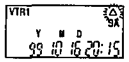
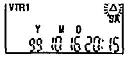
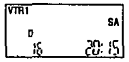
Preparation

- Turn on the VTR.
- Install the batteries in the remote controller. See page 17.

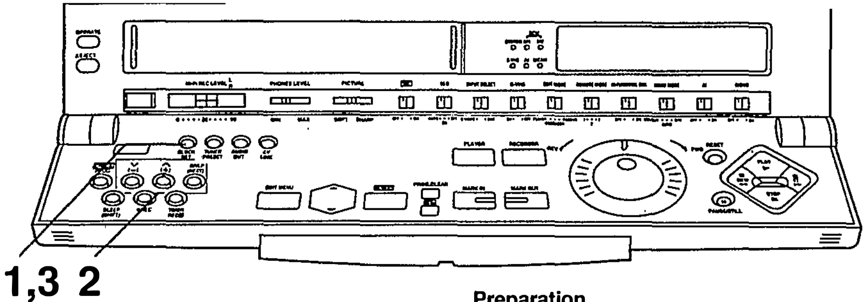
For Example:

Date; 16th, October, 1999
Time; 20:15



Operations	Display Symbols	
1		Open the door of the remote controller.
2		Set **Year** "99".
3 		Set **Month** "10".
4		Set **Date** "16".
5 		Set **Time** "20:15". • When it is kept pressed, the indication changes in 30-minute steps.
6		Press **TRANSMIT**.
7		Close the door of the remote controller.

Note:
To change the previous clock setting, press **CLOCK/ PRESET** for at least 2 seconds. The previous clock setting will be displayed. Then follow steps 2 to 7 above.



In addition to setting the VTR clock from the remote controller, it can also be set directly from the VTR.
The built-in clock is used to activate the timer for automatic recording and must be set to the correct time.

The built-in digital clock employs the 24-hour system.

Preparation

Turn on the VTR.

For Example:

Date; 16th, October, 1999
Time; 20:15

Operations **Display Symbols**

1 CLOCK SET

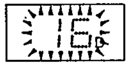
Keep **CLOCK SET** pressed for more than 2 seconds.

2 Set each item by pressing ∧ (+) or ∨ (−) and **SP/LP (NEXT)**.

∨ (−) ∧ (+)

Set **Year** "99".

Set **Month** "10".



Set **Date** "16".

SP/LP (NEXT)

Set **Hour** "20".

Set **Minute** "15".
- There is no need to press **SP/LP (NEXT)**.

3 CLOCK SET

Press **CLOCK SET**.
- The clock will start.

Note:
The clock operates for at least 60 minutes by it's backup system in the event of power failure.

Time Reset Function

If the clock is less than two minutes slow or fast, it can easily be reset to the proper time.

For example:
Resetting the clock to 12 00.00

1 Keep **CLOCK SET** pressed at any time between 11:58.00 and 12:01.59 for more than 2 seconds.
2 Press **CLOCK SET** again as soon as you hear the 12:00.00 time signal.

Summer Time Function

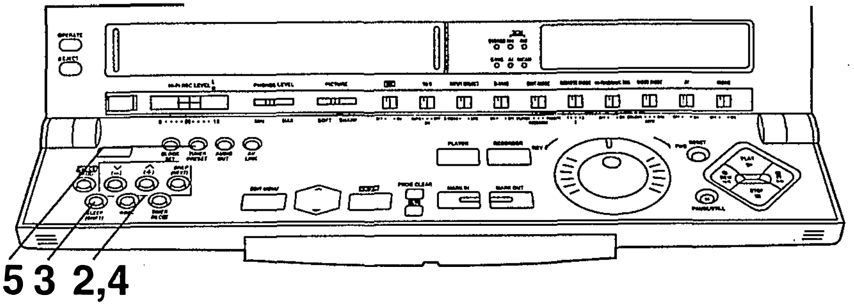
Setting to summer time
1 Keep **CLOCK SET** pressed for more than 2 seconds.
2 Press **SLEEP (SHIFT)**.
- The time on the clock is advanced by 1 hour.

3 Press **CLOCK SET**.

Returning from summer time to standard time
1 Keep **CLOCK SET** pressed for more than 2 seconds.
2 Press **SLEEP (SHIFT)** twice.
- The time on the clock is set back by 1 hour.

3 Press **CLOCK SET**.

Storing TV Broadcasts into your VTR



Introduction

The VTR is fitted with its own tuner (just like a normal TV set) and can be pre-set to receive up to 99 TV broadcast stations.

Preparation

- •Confirm that the TV is on and the VTR viewing channel is selected.
- •Turn on the VTR and Select the programme position except A1, A2 and A3.

Operations

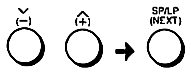
Display Symbols

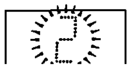
1

TUNER PRESET

Keep **TUNER PRESET** pressed for more than 2 seconds.

2





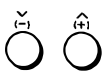
Select the programme position, then press **SP/LP (NEXT)**.

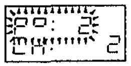
3

SLEEP (SHIFT)

Select normal TV station or Pay TV (e.g. Canal Plus Filmnet) station
- •1: To preset normal TV stations.
- •2: To preset Pay TV stations.

4





Search for the required TV station.
- •Press **SP/LP (NEXT)** and repeat steps 2–4 for each programme position you want to tune to a station.

5

TUNER PRESET

Press **TUNER PRESET** twice.

Direct Channel Input Tuning Procedure

If you know the channels on which the TV stations can be received, the TV stations can be tuned in by following the steps given below.

1 Keep **TUNER PRESET** pressed for more than 2 seconds.

2 Select the programme position by using ∧ (+) or ∨ (–), then press **SP/LP (NEXT)**.

3 Select normal TV station or Pay TV (e.g. Canal Plus, Filmnet) station by pressing **SLEEP (SHIFT)**.
- •1: To preset normal TV stations.
- •2: To preset Pay TV stations.

4 Input the channel number for the required TV station by using Number buttons on the remote controller.
- •Press **SP/LP (NEXT)** and repeat steps 2–4 for each programme position you want to tune to a station.

5 Press **TUNER PRESET** twice.

Fine Tuning Procedure

1 Keep **TUNER PRESET** pressed for more than 2 seconds, and then press again.

2 Press **SP/LP (NEXT)**.

3 Press ∧ (+) or ∨ (–) to obtain the best tuning condition.
- •"AFC" Indicator disappears.
- •To return the tuning to its former state, press **SLEEP (SHIFT)**.

4 Press **TUNER PRESET**.

Blanking of Unoccupied Programme Positions

1 Keep **TUNER PRESET** pressed for more than 2 seconds.

2 Select a programme position which you do not want to tune to a TV station, by using ∧ (+) or ∨ (–).

3 Press **SLEEP (SHIFT)**. ("--" is displayed.)
- •Repeat steps 2 and 3 for another unoccupied programme positions to skip during the selection of the programme positions.
- •To cancel the blanking of a programme position, select that programme position on the VTR and then press **SLEEP (SHIFT)**.

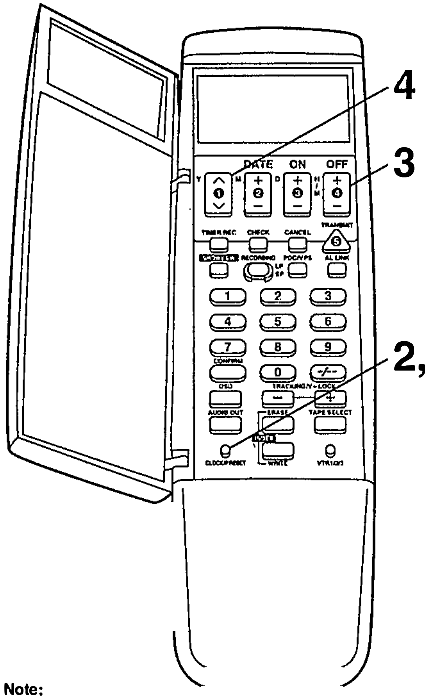
4 Press **TUNER PRESET** twice.

Channel Plan

Channel Indication	TV Channel
2–12	E2–E12
13–20	—
21–69	21–69
74–76	S1–S3
80–82	M1–M3
83–89	M4–M10
90–99	U1–U10
121–141	S21–S41

Setting Up the Remote Controller for the ShowView Programming

This remote controller uses specially designated numbers called "guide numbers" to differentiate between the TV stations. Before programming using the ShowView numbers, you must enter the guide numbers of the TV stations to be viewed and the programme positions at which those TV stations are received on the VTR into the remote controller. Have a newspaper or magazine at hand which lists the TV station guide numbers and ShowView numbers.



Note:
To receive satellite stations, the satellite receiver must be connected to the VTR and programme position must be set depending on the type of the connection made.
- A1: When the satellite receiver is connected to the AV1 socket
- A2: When the satellite receiver is connected to the AV2 socket
- A3: When the satellite receiver is connected to the Audio/Video input sockets (AV3)
- When the satellite receiver is connected by means of the RF coaxial cable, set to a free programme position between 1 and 99.

Preparation

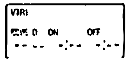
Set the clock of the remote controller first.

For Example:

TV Stat on	Guide Number	Programme Position
ARD	001	1
ZDF	002	2
RTL	004	4
SAT1	005	3

Operations **Display Symbols**

1 Open the door of the remote controller.

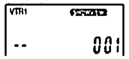


2 Keep **CLOCK/PRESET** pressed for more than 2 seconds and then press it again.

CLOCK/PRESET

3 Select the guide number (001–255).

OFF

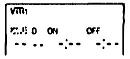


4 Select the programme position (1–99, A1–A3).

- To set the other TV stations, repeat steps 3 and 4.

5 Press **CLOCK/PRESET** twice.

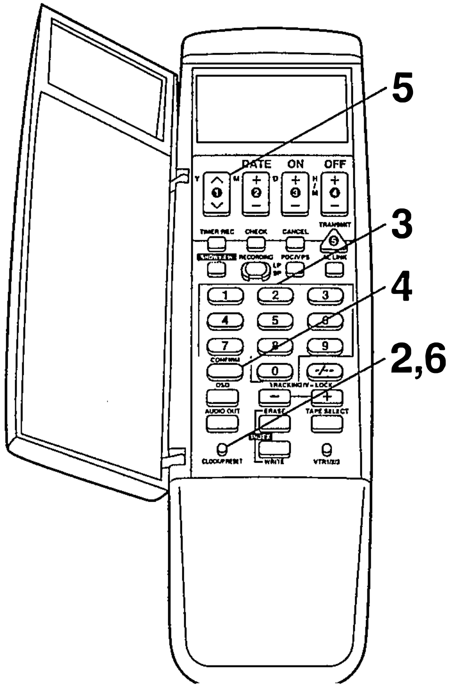
CLOCK/PRESET



6 Close the door of the remote controller.

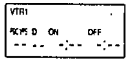
If you do not know the Guide Number of a TV Station

You can set it by figuring it out from the ShowView number for the programme broadcast by that station.



Operations **Display Symbols**

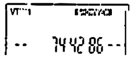
1 Open the door of the remote controller



2 Keep **CLOCK/PRESET** pressed for more than 2 seconds and then press it again.

CLOCK/PRESET

3 Enter a ShowView number.
Example: 744286



- If you have entered the wrong number press **CANCEL** and then enter the proper number.

4 Press **CONFIRM** to set the guide number.

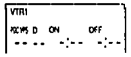
CONFIRM

5 Select the programme position (1–99, A1–A3).

- To set the other TV stations, repeat steps 3 to 5.

6 Press **CLOCK/PRESET** twice.

CLOCK/PRESET

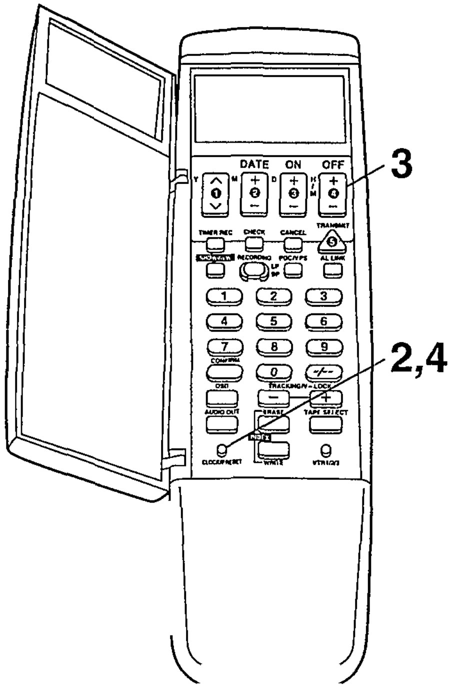


7 Close the door of the remote controller.

Note:
Enter ShowView numbers which are ahead of the present time. Otherwise, they will not be set into the proper guide numbers.

Setting the Remote Controller for Operation of your TV

You can operate some manufacture of TVs (see table below) using the supplied remote controller after this setting up.

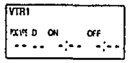


Number	Manufacturer
1	Panasonic
2	
3	
4	
5	GRUNDIG/Blaupunkt
6	PHILIPS
7	SONY

Preparation
- Turn on the TV.
- Install the batteries in the remote controller.

Operations **Display Symbols**

1 Open the door of the remote controller.



2 Keep **CLOCK/PRESET** pressed for more than 2 seconds and then press it twice.

CLOCK/PRESET
TV

- "TV" now appears on the remote controller's display.

3 Press **OFF** several times.

- When the number matches the manufacturer of your TV, the TV's power is turned off.

4 Press **CLOCK/PRESET**.

CLOCK/PRESET
VTR1
D
ON
OFF

5 Close the door of the remote controller.

When the number is 1, 2, 3 or 4:
When the TV's power is turned off in step 3 above, turn it back on and adjust the TV's volume using this remote controller. The volume can be adjusted if the number matches the manufacturer of TV. If it is not possible to adjust the TV's volume, try setting the number (1 to 4) to match the manufacturer of TV again until the volume can be adjusted.

Note:
Some TV models cannot be operated using this remote controller.

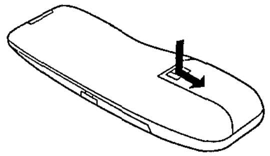
Power Source for the Remote Controller

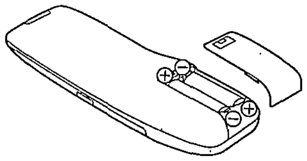
The remote controller is powered by 2 "UM3" or "R6" size batteries The life of the batteries is about one year, although this depends on the frequency of use.

Precautions for Battery Replacement

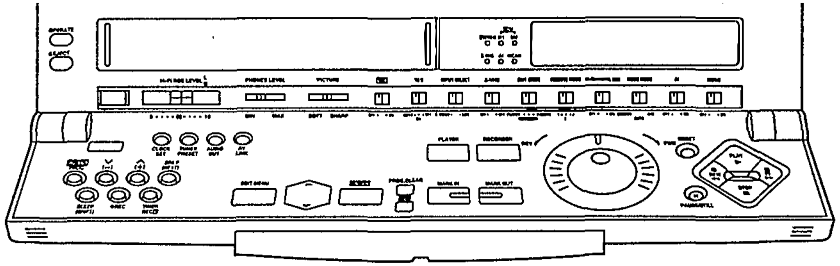
- Load the new batteries with their polarity (⊕ and ⊖) aligned correctly.
- Do not apply heat to the batteries, or an internal short-circuit may occur.
- If you do not intend to use the remote controller for a long period of time, remove the batteries and store them in a cool and dry place.
- Remove spent batteries immediately and dispose of them.
- Do not use an old and a new battery together, and never use an alkaline battery with a manganese battery.

Installing the Batteries





Initial Settings Using On Screen Displays



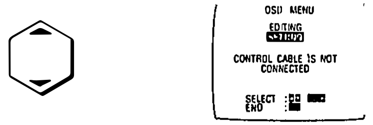
Preparation

- Confirm that the TV is on and the VTR viewing channel is selected.
- Turn on the VTR.

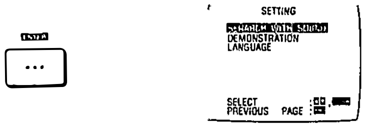
1 Press **EDIT MENU.**

2 Select **SETTING.**

On Screen Display


OSD MENU
EDITING
SETUP
CONTROL CABLE IS NOT CONNECTED
SELECT
END

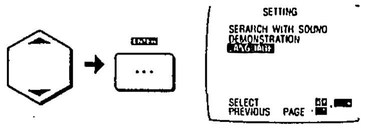
3 Press **ENTER.**


ENTER
SETTING
SEARCH WITH SOUND
DEMONSTRATION
LANGUAGE
SELECT
PREVIOUS
PAGE

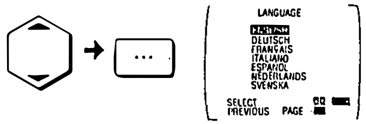
To select the Desired Language

Select one of the seven languages displayed: English, German, French, Italian, Spanish, Dutch and Swedish. Follow steps 1 to 3 of the above procedure.

4 Select **LANGUAGE**


ENTER
SETTING
SERARCH WITH SOUND
DEMONSTRATION
LANGUAGE
SELECT
PREVIOUS
PAGE

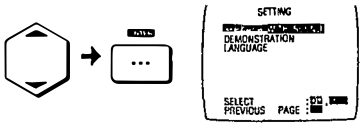
5 Select the desired language.


LANGUAGE
ENGLISH
DEUTSCH
FRANÇAIS
ITALIANO
ESPAÑOL
NEDERLANDS
SVENSKA
SELECT
PREVIOUS
PAGE

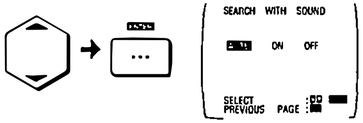
To select Sound Setting

Follow steps 1 to 3 of the above procedure.

4 Select **SEARCH WITH SOUND.**


ENTER
SETTING
SEARCH WITH SOUND
DEMONSTRATION
LANGUAGE
SELECT
PREVIOUS
PAGE

5 Select the desired setting.

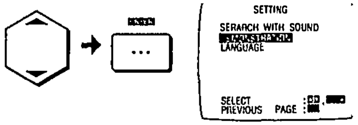

ENTER
SEARCH WITH SOUND
AUTO
ON
OFF
SELECT
PREVIOUS
PAGE

AUTO: The sound can be heard during special playback only when an editing operation is in progress.
ON: The sound can be always heard during special playback.
OFF: The sound can not be heard during special playback.

To View a Demonstration

Follow steps 1 to 3 of the above procedure.

4 Select **DEMONSTRATION.**


ENTER
SETTING
SERARCH WITH SOUND
DEMONSTRATION
LANGUAGE
SELECT
PREVIOUS
PAGE

- The On Screen Displays for editing are displayed one after the other at about five second intervals.

Optional Function

VITC (Vertical Interval Time Code)

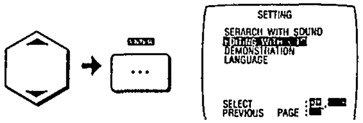
Function

As an address (individual number) is recorded for each frame, it is possible to find the accurate position of any desired scene or picture on a tape by checking the address during playback. This address is called "Time Code".
Since the VITC signals (Vertical Interval Time Code) are recorded together with the picture signals, they will not be cancelled even when the video cassette is taken out from the VTR or the VTR is switched off. This makes it possible to check the precise position of any desired picture at any time.

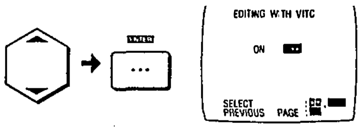
- The VITC function becomes operative when the **VTR** is equipped with the optional VITC adaptor. Consult your authorized video dealer.

Follow steps 1 to 3 of the above procedure.

4 Select **EDITING WITH VITC.**


ENTER
SETTING
SERARCH WITH SOUND
EDITING WITH VITC
DEMONSTRATION
LANGUAGE
SELECT
PREVIOUS
PAGE

5 Select the desired setting.


ENTER
EDITING WITH VITC
ON
OFF
SELECT
PREVIOUS
PAGE

ON: For reading the VITC signals during playback and writing them during recording.
The time code is indicated on the counter in increments of hours, minutes and seconds. During programme editing, it appears on the screen in increments of hours, minutes, seconds and frames (25 frames per second).
OFF: The normal counter is displayed.

Reading the VITC signals

"– ––.––" appears on the counter when the cassette is inserted. When playback is started, the VITC signals are read and the time code is displayed.

- When VITC signals have not been written on the tape, the time code is not displayed.

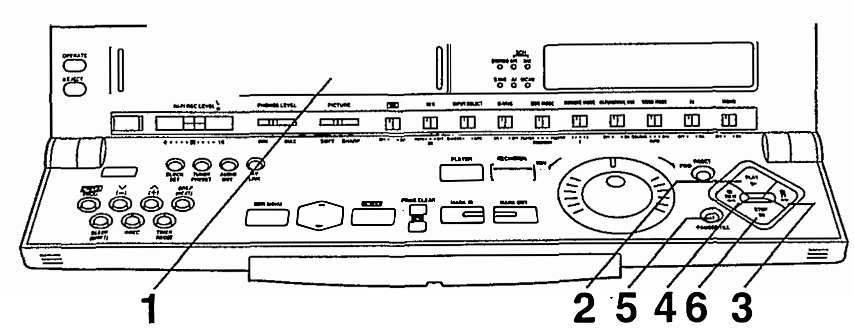
Writing the VITC signals

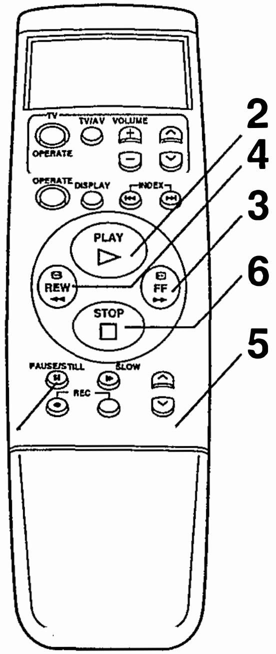
"–:––.––" appears on the counter when the cassette is inserted. When recording is started, the VITC signals are written starting at 0h00m00s00f.
If recording is started after the tape has been played back and the VITC signals read, the VITC signals will be written following on from the time code which is displayed on the counter at that time.

Notes:

- To use the VITC function to edit, be sure to first turn on the V TC function with the procedure described above, then begin editing after cancelling all editing programmes used last time.
- When tracking is out of adjustment, the VITC signals may not be properly read.
- The counter cannot be reset when the VITC function is on. This is because the VITC signals are recorded on the tape.
- When the VITC function is on, up to 50 scenes can be programmed in the programme assemble editing mode. If the VTR is not equipped with the optional VITC adaptor, a maximum of 10 scenes can be programmed using the counter.
- To make optimal use of the advantages offered by the VITC function during editing, this VTR should be connected to another NV-HS1000 also equipped with the VITC function.
When this VTR is to be connected to another unit which is not equipped with the VITC function, the editing precision will be increased if the NV-HS1000 is used as the playback VTR.

Playback





	Operations	Display Symbols	
1			Insert a recorded cassette tape.
2	PLAY ▷	▷	Start viewing the picture.
3	FF ►►	▷▷	Search forward by tapping **FF**. •To change back to normal playback, press **PLAY**.
4	REW ◄◄	◁◁	Search backward by tapping **REW**. •To change back to normal playback, press **PLAY**.
5	PAUSE/STILL II	II	View a still picture. •To continue the normal playback, press **PLAY** or **PAUSE/STILL**.
6	STOP □		Stop viewing the picture.

Other Playback Functions

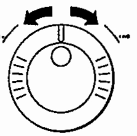
To change the Playback Speed

Using Shuttle Ring:

1 Press **PAUSE/STILL** on the VTR.

2 Rotate Shuttle Ring.

PAUSE/STILL → Backward



Forward

Using Remote Controller:

Press **SLOW** during playback to activate slow playback.

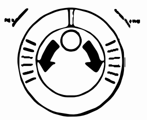
SLOW

To locate the Desired Picture exactly

1 Press **PAUSE/STILL** on the VTR.

2 Turn Jog Dial.

PAUSE/STILL → Backward



Forward

To obtain High Speed Picture during Fast Forward or Rewind

Keep **FF** pressed during fast forward.

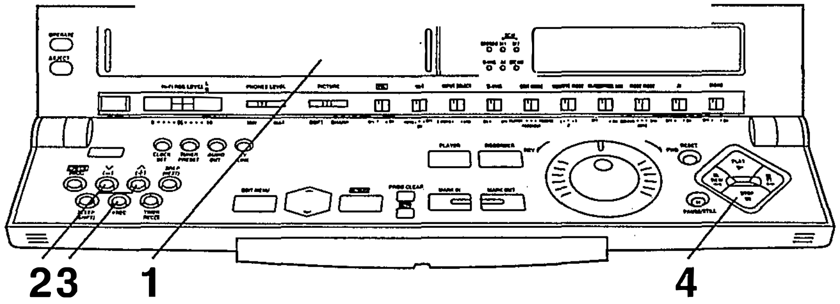
Keep **REW** pressed during rewind

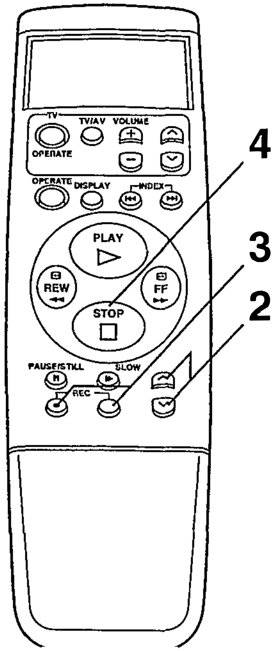
REW ◄◄ FF ►►

Note:

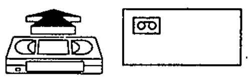
- •Audio reproduction of linear (conventionally recorded) tapes will be monaural when played back on the FM Hi-Fi video recorders.
- •Cue or review playback will be automatically released after 10 minutes, and still or slow playback after 5 minutes.

On-the-spot Recording

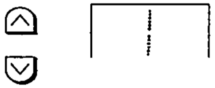



TV
TV/AV
VOLUME
OPERATE
DISPLAY
INDEX
PLAY
REW
FF
STOP
PAUSE/STILL
SLOW
REC
4
3
2

Operations **Display Symbols**

1 

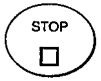
Insert a cassette tape.
- If it has already been inserted, press **OPERATE** to turn the VTR on.

2 

Select TV station.

3

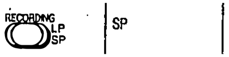
Start recording.

4 

Stop recording.

To select the Desired Tape Speed

Press **SP/LP** before recording.


RECORDING
LP
SP
SP

To interrupt Recording

Press **PAUSE/STILL** during recording.
Press again to continue recording.

PAUSE/STILL

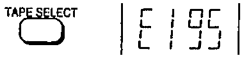
To record One TV Programme while Viewing Another Programme

1 Refer to the on-the-spot recording operations steps 1 to3.

2 Select the TV programme on your TV set you wish to view at the present time.

To display the Approximate Remaining Tape Time

1 Press **TAPE SELECT** to select the corresponding cassette tape length.

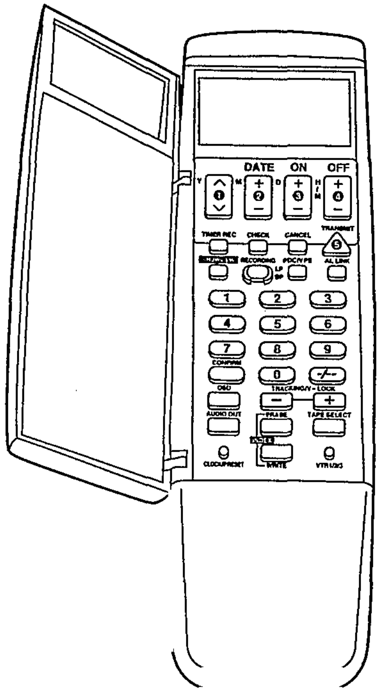

TAPE SELECT
E195

E195: For E30, -60, -80, -120, -180 and -195 tapes
E240: For E240 tape
E260: For E260 and -300 tapes

2 Press **DISPLAY**.

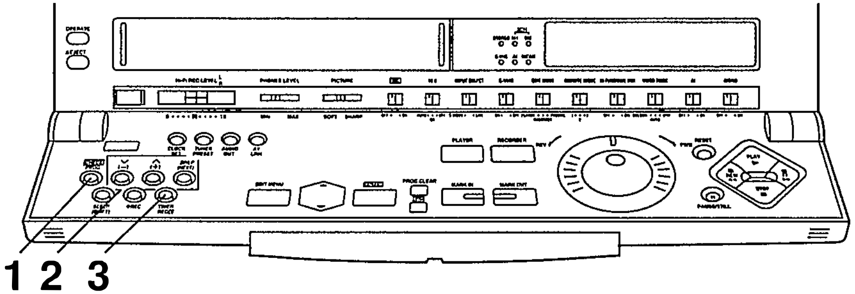
DISPLAY
1:05

→Clock→Counter→**Remaining Tape Time**→


DATE
ON
OFF
TIMER REC
CHECK
CANCEL
TRANSMIT
RECORDING
ALL LINK
CONFIRM
OSD
TRACKING/V-LOCK
AUDIO OUT
FRAME
TAPE SELECT
CLOCK/PRESET
WRITE
VTR 1/2/3

Notes:
- When a video cassette with a broken off tab is inserted, the "▭" indication will flash to indicate that recording is not possible.
- The recording pause mode will be automatically released after 5 minutes, and be back to the stop mode.

Timer Recording



Up to 8 timer programmes can be recorded up to one month in advance by setting the timer, including daily and weekly programmes.

Preparation
Insert a cassette tape with an intact erasure prevention tab.

For Example:

Timer programme number;	1
Programme position (channel);	2
Date;	27th, October
Starting time;	20:02
Ending time;	21:30
(present date; 16th October)	

Operations

Display Symbols

1 Select **Timer programme number** "1".

2 Set each item by pressing ∧ (+) or ∨ (–) and **SP/LP (NEXT)**.

Set **Programme position** (channel) "2".

Set **Date** "27".
- For daily and weekly recording, see next page.

Set **Starting time** (hour) "20".

Set **Starting time** (minute) "02".

Set **Ending time** (hour) "21".

Set **Ending time** (minute) "30"
- There is no need to press **SP/LP (NEXT)**.

3 To activate timer recording, press **TIMER REC**.

Setting for Daily and Weekly Timer Recording
In the Date setting step, press ∨ (–) repeatedly until the desired day (days) is displayed.

Daily recording From Sunday to Saturday	SU MO TU WE TH FR SA
From Monday to Saturday	MO TU WE TH FR SA
From Monday to Friday	MO TU WE TH FR
Weekly recording For example, Sunday	SU

Timer Recording from External Signal Source
If Timer Recording is performed by a unit connected to the AV1/AV2 Socket or the Audio/Video/S-Video input sockets, select the A1, A2 or A3 indicator for the programme position.

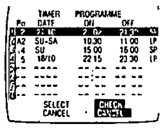
A1: Through the AV1 socket
A2: Through the AV2 socket
A3: Through the AV3 sockets on front panel
Set **INPUT SELECT** on the VTR.
S-VIDEO: Through the S-VIDEO IN and AUDIO IN sockets
LINE: Through the VIDEO IN and AUDIO IN sockets

Selecting the Desired Tape Speed
After step **2**, press **SP/LP (NEXT)** and select SP or LP by pressing ∧ (+) or ∨ (–).

Setting other Programmes in Succession
Repeat steps **1** and **2**.

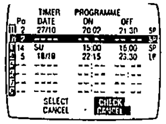
Checking a Timer Programme
Select the timer programme number to be checked by pressing **CHECK/PROG**.

On Screen Display



Po	DATE	ON	OFF	
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
A2	SU-SA	10:30	11:00	LP
4	SU	15:00	16:00	SP
5	18/10	22:15	23:30	LP
--	----	--:--	--:--	
--	----	--:--	--:--	
--	----	--:--	--:--	
--	----	--:--	--:--	

Cancelling a Timer Programme
1 Press **TIMER REC** to turn off the timer recording function.
2 Select the timer programme number to be canceled by pressing **CHECK/PROG**.
3 Press ∧ (+) and ∨ (–) simultaneously for more than 3 seconds.



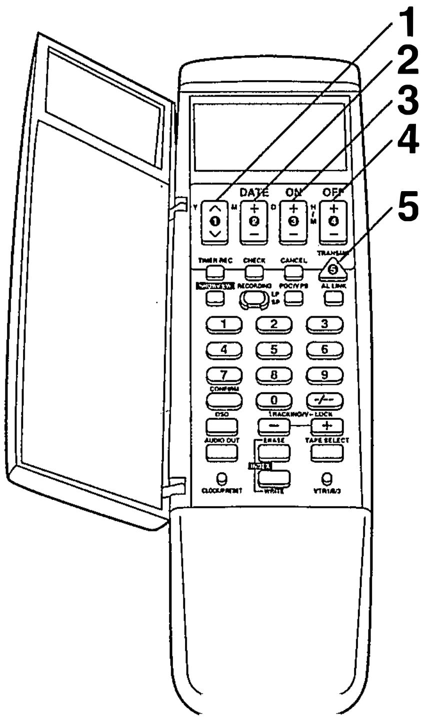
Po	DATE	ON	OFF	
2	27/10	20:02	21:30	SP
2	----	--:--	--:--	SP
14	SU	15:00	16:00	SP
5	18/10	22:15	23:30	LP
--	----	--:--	--:--	
--	----	--:--	--:--	
--	----	--:--	--:--	
--	----	--:--	--:--	

Optional Function
PDC (Programme Delivery Control)/VPS (Video Programme System)
The Programme Delivery Control (PDC) or the Video Programme System (VPS) is a very convenient system which assures that the TV programmes you have programmed for timer recording will be recorded exactly from beginning to end, even if the actual broadcasting time differs from the scheduled time due to delayed start or extension of the programme duration. Also, if a programme is interrupted and, for example, some special news are inserted, the recording will also be interrupted automatically and resumed when the programme continues.

- This model is equipped with PDC/VPS function. The PDC/VPS function becomes operative when the VTR is equipped with the optional VPS/PDC decoder. Consult your authorized video dealer.
- Press **SLEEP (SHIFT)** in step **2** to cancel the PDC/VPS function.
- In the case of PDC/VPS recording, use the **correct** time (PDC/VPS time) for recording the TV programmes. PDC/VPS recording is not performed when the time (PDC/VPS time) is incorrect, even if only by one minute.
- If the actual broadcasting times of timer recordings overlap (regardless of whether they are PDC/VPS controlled), the recording that starts first has always priority, and the recording of the later beginning programme will start only after the first timer recording has finished.
- When the PDC/VPS signal drops out because the broadcast signal is weak, or when a broadcasting station does not transmit a regular PDC/VPS signal, the timer recording will be performed in the normal mode (without PDC/VPS) even if it was programmed for PDC/VPS.
In this case, even if the timer recording is performed, whatever has been programmed will not be cancelled at that particular time but at 4 a.m. on the following day.

Note:
If a timer recording is not performed to the end (due to insufficient tape or cancellation by the user), the programmed timer recording data will be cancelled from the memory by 4 a.m. two days later.
However, if the Timer Record Function is activated at that time, the programmed timer recording data will be cancelled at 4 a.m. the next day.

Using the Remote Controller



Preparation

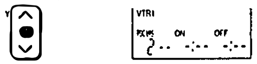
- •Insert a cassette tape with an intact erasure prevention tab.
- •Open the door of the remote controller.

For Example:

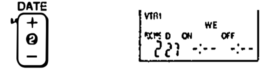
Programme position (channel);	2
Date;	27th, October
Starting time;	20:02
Ending time;	21:30

Operations **Display Symbols**

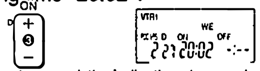
1 Set Programme position (channel) "2".



2 Set Date "27".



3 Set Starting time "20:02".

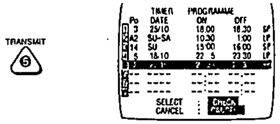


•When it is kept pressed, the indication changes in 30-minute steps.

4 Set Ending time "21:30".

5 Press **TRANSMIT**.

On Screen Display



6 Close the door of the remote controller.

Daily Timer Recording

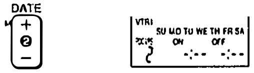
For this timer function, several groups of days can be selected.

Ⓐ Daily recording from Sunday to Saturday

Ⓑ Daily recording from Monday to Saturday

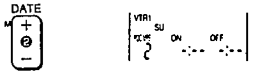
Ⓒ Daily recording from Monday to Friday

In step 2, select the desired days by pressing **DATE –**.
For Example, Ⓐ



Weekly Timer Recording

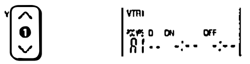
In step 2, select the desired day by pressing **DATE –**.
For example, SU (Sunday)



Timer Recording from External Signal Source

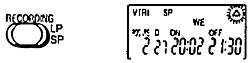
If Timer Recording is performed by a unit connected to the AV1/AV2 Socket or the Audio/Video/S-Video Input sockets, select the A1 A2 or A3 indicator in step 1 for the programme position.

A1: Through the AV1 socket
A2: Through the AV2 socket
A3: Through the AV3 sockets on front panel
Set **INPUT SELECT** on the VTR.
S-VIDEO: Through the S-VIDEO IN and AUDIO IN sockets
LINE: Through the VIDEO IN and AUDIO IN sockets



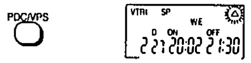
Selecting the Desired Tape Speed

Press **RECORDING SP/LP** in any of steps 2–4.



Turning PDC/VPS Function On and Off

Press **PDC/VPS** in any of steps 2–4.

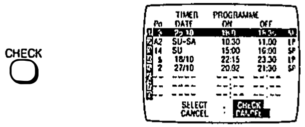


Checking a Timer Programme

•The VTR must be turned on, or the timer recording indicator "⌚" is lit.

Press **CHECK**.

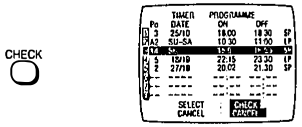
On Screen Display



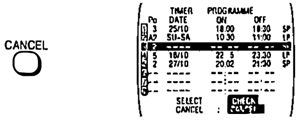
Cancelling a Timer Programme

•The VTR must be turned on, or the timer recording indicator "⌚" is lit.

1 Press **CHECK** repeatedly to select the desired timer programme number.



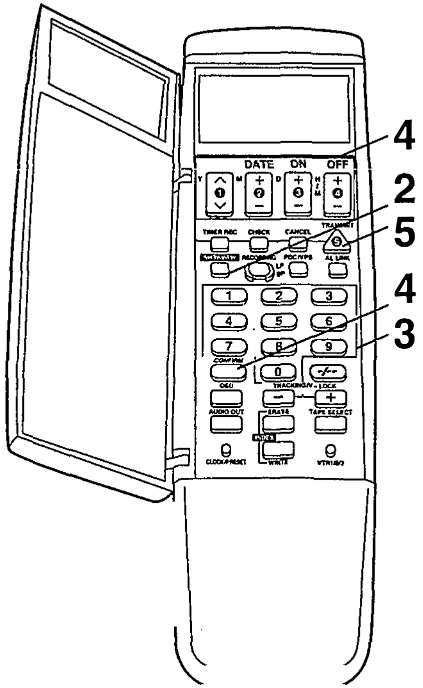
2 Press **CANCEL**.



Other Functions

ShowView Programming

Programming is now easier than ever: simply enter the ShowView number provided in the programme schedule column carried by newspapers and magazines. ShowView numbers are numbers which are assigned to each programme listed in the TV programme schedule carried in newspapers and TV guides. When these numbers are entered and **TRANSMIT** is pressed, the numbers are converted into the actual programming and sent to the VTR.

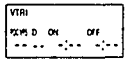

4
2
5
4
3
DATE
ON
OFF
TIMER REC
CHECK
CANCEL
TRANSMIT
RECORDING
PDC/VPS
ALL LINK
CONFIRM
OSD
TRACKING/V-LOCK
AUDIO OUT
ERASE
TAPE SELECT
CLOCK/P.RESET
WRITE
VTR1/2

Preparation

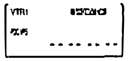
- Insert a cassette tape with an intact erasure prevention tab.
- Set the programme positions on both the VTR and remote controller as shown on pages 12–15.

Operations — Display Symbols

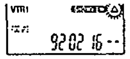
1 Open the door of the remote controller.


VTR1
D
ON
OFF

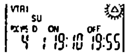
2 Press **SHOWVIEW**.



3 Enter a ShowView number.
Example: 920216


VTR1
9202 16--

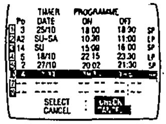
4 Press **CONFIRM** to check that the number corresponds to the right programme.


VTR1
SU
D
ON
OFF
19:10 19:55

- To make any corrections, use buttons ❶–❹.

5 Press **TRANSMIT**.

On Screen Display


TIMER
PROGRAMME
DATE
ON
OFF
SELECT
CANCEL

6 Close the door of the remote controller.

Notes:

- To select the desired tape speed, press **RECORDING SP/LP** in any of steps **3–4**.
- To cancel the PDC/VPS function, press **PDC/VPS** in any of steps **2–4**.
- When the ShowView number is used for programming, the recording time may be slightly longer than the actual programme time.
- Repeat steps **2** to **4** if "Err" appears on the remote controller.
- When programming two or more programmes, repeat steps **2** to **5**.
- The procedures for checking and cancelling whatever has been programmed are the same as for remote control programming.

VHS Index Search System

It is very easy to find the beginning of each recording, because a special index signal is recorded at the start of each recorded segment on the tape.

For example:
Searching for the 2nd recorded segment in the forward direction.
Press **INDEX ▶▶I** twice.

- After finding the specific recorded segment, playback starts automatically.
- For the reverse direction, press **INDEX I◀◀**.
- Up to 20 programmes can be searched for in both directions.

Recording Index Signals
Index signals are recorded in following cases.
WRITE indicator appears on the Display.

- When a recording is started by pressing **REC**.
- When **REC** is pressed during recording.
- When timer recording is activated.
- When **WRITE** is pressed during playback.

Erasing Index Signals

1 Search the index signal to be erased by pressing **INDEX ▶▶I** or **I◀◀**.
   - Be sure not to omit this step. Otherwise, this function may not work correctly.

2 Press **PAUSE/STILL** when playback starts.

3 Press **ERASE**.
   - Erasing is possible during playback if **ERASE** is pressed during the five seconds following the index signal.

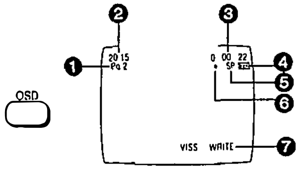
Notes:

- The index search function can only work correctly, if the index signals are spaced at least 3 minutes apart in the SP mode and 5 minutes apart in the LP mode.
- Index signals can not be recorded or erased on a video cassette with a broken off tab.

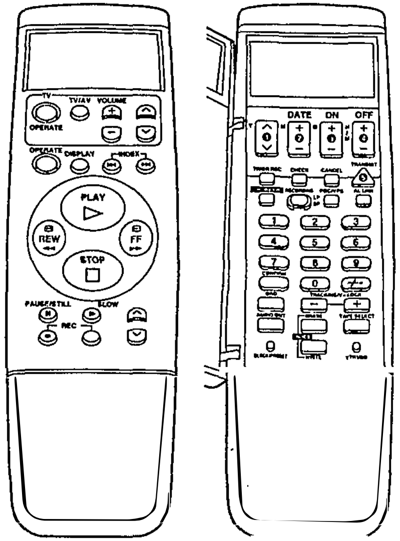
On Screen Display

Press **OSD** to make the On Screen Display appear on the TV screen.

- To make this display disappear, press **OSD** again.


OSD
❶
❷
❸
❹
❺
❻
❼
20 15
Pr 2
0 00 22
SP
VISS
WRITE

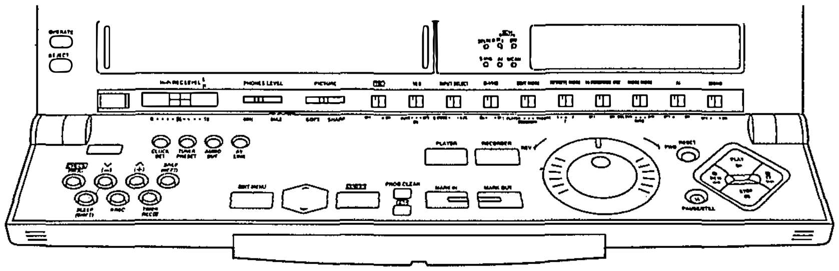
Note:
On Screen Display will not appear during NTSC playback.

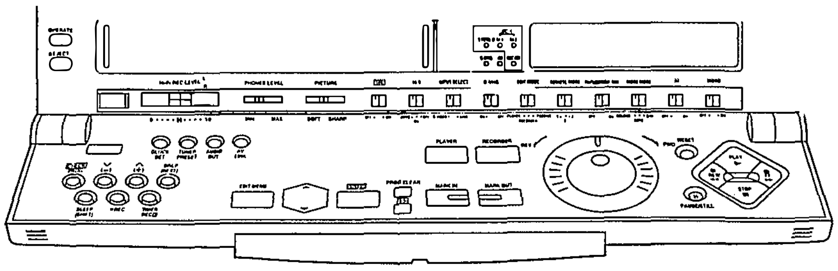

TV
TV/AV
VOLUME
OPERATE
DISPLAY
INDEX
PLAY
REW
FF
STOP
PAUSE/STILL
SLOW
REC
DATE
ON
OFF
WRITE

❶ Programme position
❷ Present time
❸ Tape counter
❹ Cassette-in indicator
❺ Tape speed indicator
❻ Tape running display

Stop, Eject	■
Rewind, Review	◀◀
Fast Forward, Cue	▶▶
Playback	▶
Reverse Playback	◀
Still Playback	II
Recording, Insert, Audio Dubbing	●
Recording Pause, Insert Pause, Audio Dubbing Pause	II●
Slow Playback	I▶
Reverse Slow Playback	◀I

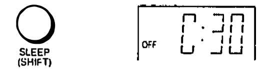
❼ Index signal writing or erasing indicator





Automatic VTR Off Time Setting

Press **SLEEP** for the desired time.



- Each press gives a 30 minutes time span up to 9 hours.
- To cancel the setting time, press **SLEEP** repeatedly to set 0:00.

NTSC Playback

Tapes recorded in the NTSC system can be played back with this VTR via a PAL system TV set.

- The playback picture may roll up or down. If the TV set is equipped with a V-HOLD control, it may be possible to stop the picture movement by adjusting this control.
- Depending on the TV set used, the picture may be in black and white. However, this is not an indication of a malfunction.

Other Automatic Functions

Automatic Playback

When a cassette without an erasure prevention tab is inserted, the VTR starts playback automatically.

VTR-off Playback

When the VTR is off, an inserted cassette can be played back by pressing **PLAY**.

Automatic Rewinding

When the tape reaches its end during recording (except for timer recording) or playback, it will automatically be rewound to the beginning.

Automatic Switching Off and Ejection

When the VTR is switched off, an inserted cassette can be ejected simply by pressing **EJECT**. The VTR will eject the cassette and automatically turn itself off again.

Hi-Fi Audio System

This VTR is equipped for reception of stereo/bilingual broadcasts both in the NICAM stereo/bilingual sound system employed in the Scandinavia etc. and in the Stereo/bilingual sound system used in Germany and other Central European countries.

NICAM is a 2 Channel sound broadcast system to provide either a high quality stereo sound track or 2 Independant MONO sound tracks, M1 and M2.

NICAM programmes are always accompanied by standard sound broadcasts and you can select the desired sound with **MONO** (when recording) or with **AUDIO OUT** (when playback).

The NICAM digital stereo sound can only be recorded on the Hi-Fi audio track.

When a stereo, bilingual or NICAM programme is being received, the indicators are lit to inform you of the type of broadcast.

Reception of a Stereo Broadcast

When the STEREO indicator is lit, set **MONO** to OFF to be able to record on the Hi-Fi sound track stereo.

Reception of a Bilingual Broadcast

When the M1 and M2 indicators are lit, set **MONO** to OFF if you want to record both channels on the Hi-Fi sound track. M1 is the main channel and M2 is the sub channel.

Reception of a NICAM Stereo Broadcast

When the NICAM and STEREO indicators are lit, set **MONO** to OFF to be able to record on the Hi-Fi sound track in stereo.

Reception of a NICAM Dual-Sound Broadcast

When the NICAM, M1 and M2 indicators are lit, set **MONO** to OFF if you want to record both channels on the Hi-Fi sound track. M1 is the left-hand channel and M2 is the right-hand channel.

Reception of a NICAM Monaural Broadcast

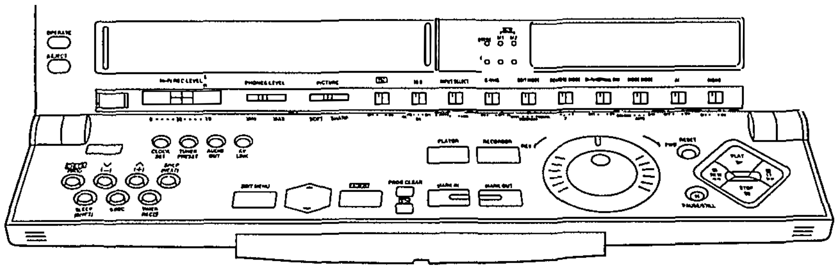
When a NICAM monaural broadcast is being received, the NICAM and M1 indicators are lit. To hear such a signal on both channels and to record it on both channels of the Hi-Fi track, set **MONO** to OFF.

- To record the regular sound (ordinary normal sound) on the FM audio tracks when a Stereo, Bilingual or NICAM programme is received, set **MONO** to ON.

Important Note for the NICAM System

When this VTR tuner is switched on, it will automatically switch to a NICAM broadcast, if NICAM is being transmitted. During test transmissions, it is possible that the sound received doesn't correspond to the picture being viewed. In order to receive a synchronized sound and picture, select monaural sound with either **AUDIO OUT** or with **MONO**. This will only apply until NICAM transmissions are fully operational.

At this time the NICAM signal is transmitted on stereo channels only, since the M1 and M2 formats are not yet available. Even if the soundtrack is in MONO, the stereo indicator will remain illuminated.



Pay TV

The connection of a Pay TV (e.g. Canal Plus, Filmnet) Decoder to the AV2 Socket of this VTR makes it possible to record Pay TV broadcasts. When such a decoder is connected to the VTR, it is also possible to watch Pay TV programmes directly on the connected TV set. So only one decoder is necessary. See page 7.

Preparation

- Turn on the VTR, the Pay TV Decoder and the TV set.
- Insert a video cassette with intact erasure prevention tab.
- The VTR must have been preset for reception of Pay TV broadcasts like for any ordinary TV station as described in "Storing TV Broadcasts into your VTR" on page 12.

To Record a Pay TV Programme While Watching the Same Pay TV Programme

1 Press **AV LINK** to select the VTR mode.

2 Select the desired Pay TV station.

3 Press **REC** to start recording.

4 Press **STOP** to stop recording.

To Record a Normal TV Programme While Watching a Pay TV Programme

1 Press **AV LINK** to select the TV mode.

2 Select on the VTR the normal TV station that you want to record.

3 Press **REC** to start recording.

4 Select on the TV set the desired Pay TV station for watching.

5 Press **STOP** to stop recording.

To Record a Pay TV Programme While Watching a Normal TV Programme

1 Press **AV LINK** to select the TV mode.

2 Select on the VTR the Pay TV station that you want to record.

3 Press **REC** to start recording.

4 Select on the TV set the desired normal TV station for watching.

5 Press **STOP** to stop recording.

Editing Preparation

This VTR is equipped with programme editing functionality. If connected via edit cable to another VTR or a movie camera, it is possible to control such functions as tape playback and editing.

Connections

Connecting This VTR with Another Identical One

- Connect the two VTRs with an edit cable.
- Connect the AV1 socket on the recording VTR to the TV.
- Connect the AV1 socket on the playback VTR to the AV2 socket on the recording VTR.
- Select A2 by pressing ∧ ∨ on the recording VTR.
- Set **EDIT MODE** to PASSIVE on the playback VTR, and to RECORDER on the recording VTR.
- Control is performed by the recording VTR.

Using This VTR as the Recording VTR

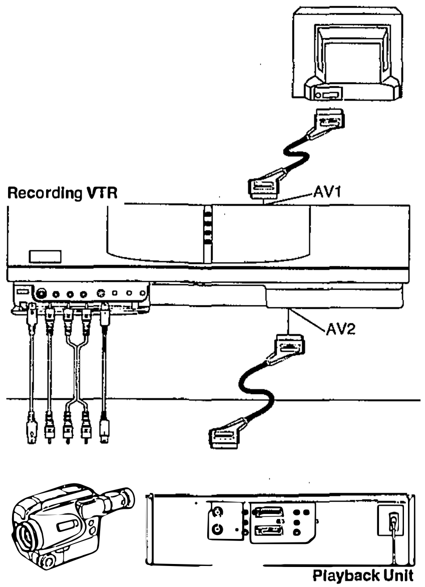
- Connect this VTR to the playback unit with an edit cable.
- Connect the AV1 socket on this VTR to the TV.
- Connect the AV2 socket or the AUDIO/VIDEO/S-VIDEO IN (AV3) sockets on this VTR to the playback unit.
- Select A2 or A3 by pressing ∧ ∨ on this VTR.

A2: *Through the* AV2 socket
A3: Through the AV3 sockets on front panel
 Set **INPUT SELECT** on this VTR.
 S-VIDEO: Through the S-VIDEO IN and AUDIO IN sockets
 LINE: Through the VIDEO IN and AUDIO IN sockets

- Set **EDIT MODE** on this VTR to RECORDER.
- Control is performed by this VTR.

Using This VTR as the Playback VTR

- Connect this VTR to the recording unit with an edit cable.
- Connect the AV1 socket on this VTR to the TV.
- Connect the AV2 socket on this VTR to the recording unit.
- Select A2 by pressing ∧ ∨ on this VTR.
- Set the Input switch on the recording unit to AV.
- Set **EDIT MODE** on this VTR to PLAYER.
- Control is performed by this VTR.



Notes:

- When connecting a VTR or movie camera which does not have an edit socket, see page 50.
- During editing operations, operate using this VTR do not operate the other unit.
- When this VTR is used as the playback VTR, it may not be possible to perform editing operations properly depending on the type of the recording VTR. In such a case, use this VTR as the recording VTR.
- When a movie camera is connected, operating this VTR will not facilitate reverse playback or reverse slow playback on the movie camera.
- When **EDIT MODE** on this VTR is set to PASSIVE, operation will not be possible, and the On Screen Display will not appear.
- When making a connection using an edit cable, disconnection of the AC mains lead on this VTR may result in erroneous display patterns on the other unit.
- When operating the Jog Dial and Shuttle Ring, it is only possible to reset the tape counter of the other unit during still playback.
- The supplied edit cable cannot be used to connect two other VTRs with edit sockets.
- The On Screen Display does not appear when no Input signals are supplied from another unit or when a non-recorded cassette is played.
- The On Screen Display may appear distorted if the picture is affected by noise.

Editing Functions

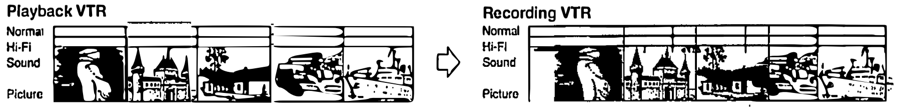
Using this VTR, 4 types of manual editing and 4 types of programme editing can be selected.
In programme editing, after programming up to 10 scenes for each type, editing can be performed automatically.

Manual Editing
- •Copying
- •Insert Editing
- •AV Insert Editing
- •Audio Dubbing

Programme Editing
- •Assemble Editing
- •Insert Editing
- •AV Insert Editing
- •Audio Dubbing

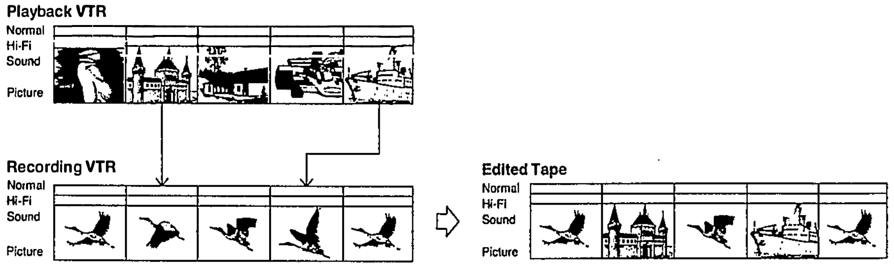
Copying

Allows the re-recording (copying) of the picture and sound from one tape onto another tape.


Playback VTR
Normal
Hi-Fi
Sound
Picture
Recording VTR
Normal
Hi-Fi
Sound
Picture

Insert Editing

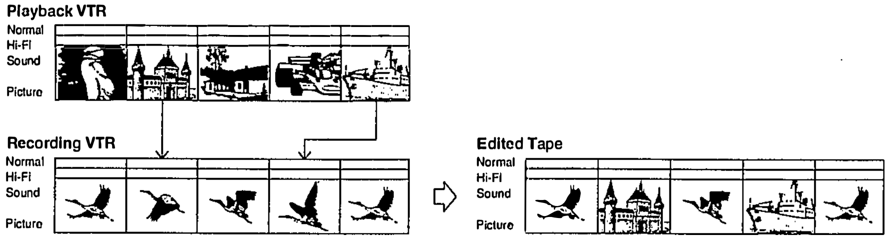
Allows the partial replacement of the picture and Hi-Fi sound on a recorded tape. Normal sound is left in its original state.


Playback VTR
Normal
Hi-Fi
Sound
Picture
Recording VTR
Normal
Hi-Fi
Sound
Picture
Edited Tape
Normal
Hi-Fi
Sound
Picture

- •To hear the original sound, select the normal sound track by pressing **AUDIO OUT**.
- •To hear the new sound and original sound mixed together, set **HI-FI/NORMAL MIX** to ON.

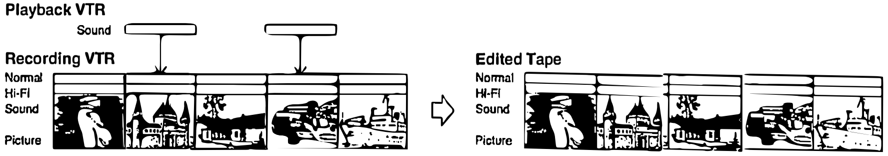
AV Insert Editing

Allows the partial replacement of the picture and both the Hi-Fi and normal sound on a recorded tape.


Playback VTR
Normal
Hi-Fi
Sound
Picture
Recording VTR
Normal
Hi-Fi
Sound
Picture
Edited Tape
Normal
Hi-Fi
Sound
Picture

Audio Dubbing

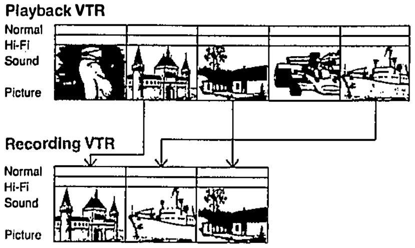
Allows the partial replacement of the normal sound on a recorded tape. Hi-Fi sound is left in its original state.


Playback VTR
Sound
Recording VTR
Normal
Hi-Fi
Sound
Picture
Edited Tape
Normal
Hi-Fi
Sound
Picture

- •To hear the new sound, select the normal sound track by pressing **AUDIO OUT**.
- •To hear the new sound and original sound mixed together, set **HI-FI/NORMAL MIX** to ON.

Assemble Editing

Allows the required scenes (picture and sound) to be picked up from one or more recorded tapes and recorded in any desired order onto another tape.

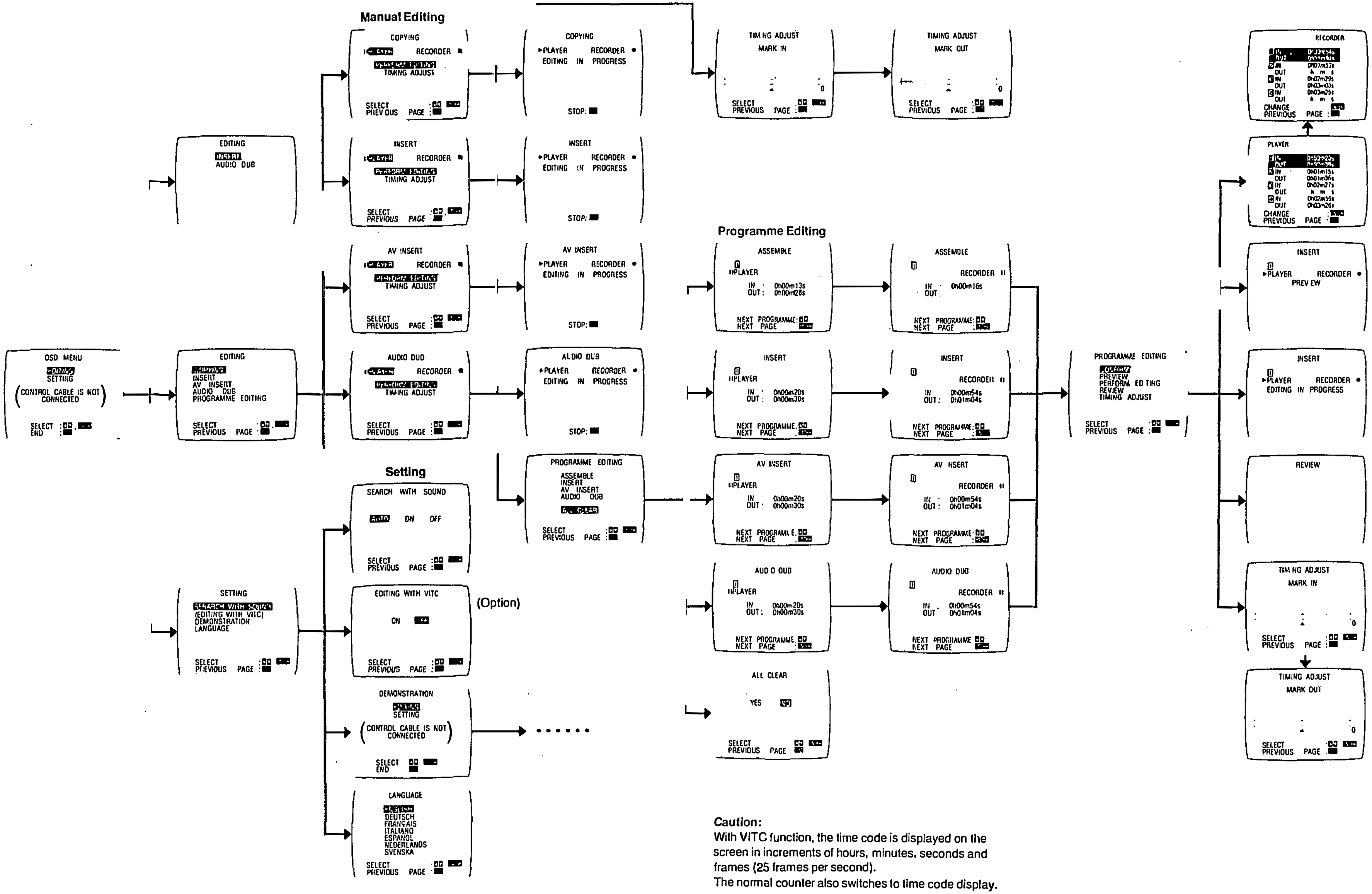

Playback VTR
Normal
Hi-Fi
Sound
Picture
Recording VTR
Normal
Hi-Fi
Sound
Picture

VITC Editing (option)

Upgrading can be done through your dealer or one of our Panasonic Service Centers.
- •VITC enables picture-precise editing.
- •The VITC can also be read during pause and slow-motion.
- •VITC=Vertical Interval Time Code

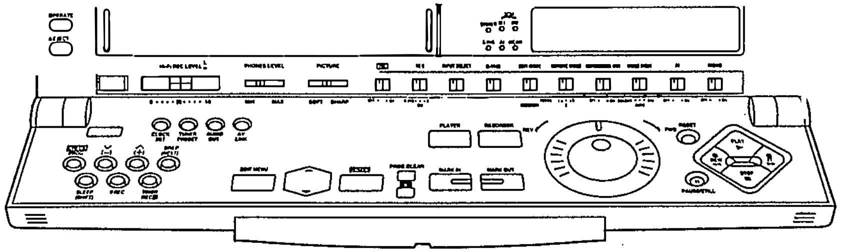
After upgrading, the NV-HS1000 is able to read or write VITC depending on the application.
This time code (VITC) is recorded together with the picture.

Flow Chart for On Screen Displays


Manual Editing
OSD MENU
EDITING
SETTING
(CONTROL CABLE IS NOT CONNECTED)
SELECT
END
EDITING
INSERT
AUDIO DUB
EDITING
ASSEMBLE
INSERT
AV INSERT
AUDIO DUB
PROGRAMME EDITING
SELECT
PREVIOUS PAGE
COPYING
RECORDER
TIMING ADJUST
INSERT
AV INSERT
AUDIO DUB
PLAYER
EDITING IN PROGRESS
STOP
TIMING ADJUST
MARK IN
MARK OUT
Programme Editing
PROGRAMME EDITING
ASSEMBLE
INSERT
AV INSERT
AUDIO DUB
ALL CLEAR
PLAYER
IN
OUT
NEXT PROGRAMME
NEXT PAGE
0h00m13s
0h00m28s
0h00m16s
0h00m20s
0h00m30s
0h00m54s
0h01m04s
ALL CLEAR
YES
PROGRAMME EDITING
PREVIEW
PERFORM EDITING
REVIEW
TIMING ADJUST
RECORDER
PLAYER
CHANGE
INSERT
PREVIEW
REVIEW
Setting
SETTING
SEARCH WITH SOUND
EDITING WITH VITC
DEMONSTRATION
LANGUAGE
SEARCH WITH SOUND
AUTO
ON
OFF
EDITING WITH VITC
ON
(Option)
DEMONSTRATION
SETTING
(CONTROL CABLE IS NOT CONNECTED)
LANGUAGE
ENGLISH
DEUTSCH
FRANÇAIS
ITALIANO
ESPAÑOL
NEDERLANDS
SVENSKA
......

Caution:
With VITC function, the time code is displayed on the screen in increments of hours, minutes, seconds and frames (25 frames per second).
The normal counter also switches to time code display.

Manual Editing



Copying

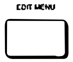
Preparation

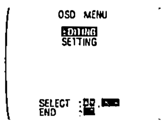
- Make the necessary connections. See page 33.
- Insert a recorded cassette into the playback VTR, and a cassette with an intact erasure prévention tab into the recording VTR.
- Confirm that the TV is on.

Operations

On Screen Display

1

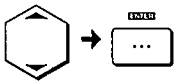


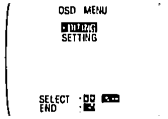


OSD MENU
EDITING
SETTING
SELECT
END

Press **EDIT MENU**.

2

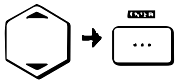


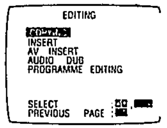


OSD MENU
EDITING
SETTING
SELECT
END

Select **EDITING**.

3

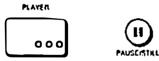


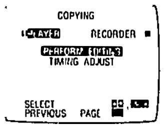


EDITING
COPYING
INSERT
AV INSERT
AUDIO DUB
PROGRAMME EDITING
SELECT
PREVIOUS PAGE

Select **COPYING.**
- If the playback VTR receives no input signals, the On Screen Display may disappear.
  In such a case, follow the next step and then the On Screen Display will appear.

4





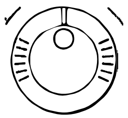
COPYING
PLAYER RECORDER ■
PERFORM EDITING
TIMING ADJUST
SELECT
PREVIOUS PAGE

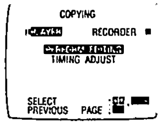
Press **PLAYER** and **PAUSE/STILL.**
- The picture from the playback VTR appears on the screen.

Operations

On Screen Display

5

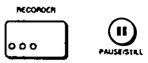


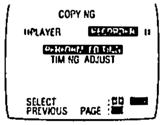


COPYING
PLAYER RECORDER ■
PERFORM EDITING
TIMING ADJUST
SELECT
PREVIOUS PAGE

Search for the edit start point on the playback VTR.

6

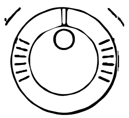


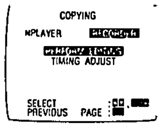


COPYING
PLAYER RECORDER II
PERFORM EDITING
TIMING ADJUST
SELECT
PREVIOUS PAGE

Press **RECORDER** and **PAUSE/STILL.**
- The picture from the recording VTR appears on the screen.
- Steps **6** and **7** need not be performed when a non-recorded cassette is used.

7

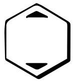


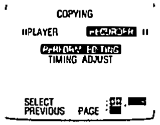


COPYING
PLAYER RECORDER
PERFORM EDITING
TIMING ADJUST
SELECT
PREVIOUS PAGE

Search for the edit start point on the recording VTR.

8

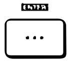


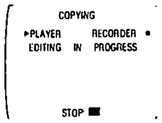


COPYING
IIPLAYER RECORDER II
PERFORM EDITING
TIMING ADJUST
SELECT
PREVIOUS PAGE

Select **PERFORM EDITING.**

9

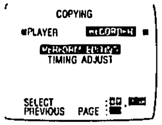




COPYING
▸PLAYER RECORDER ●
EDITING IN PROGRESS
STOP

Press **ENTER.**
- Editing begins.

10

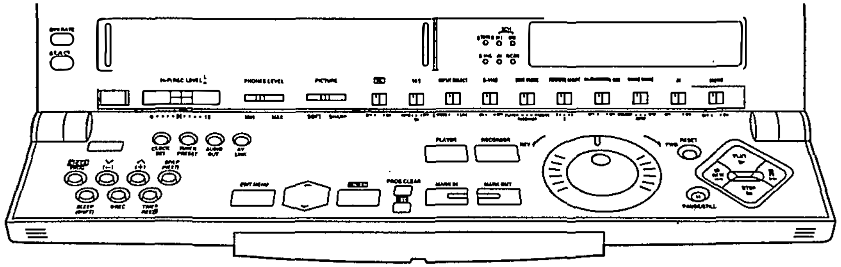


COPYING
PLAYER RECORDER ■
PERFORM EDITING
TIMING ADJUST
SELECT
PREVIOUS PAGE

Press **ESC** to stop editing.

11

Press **EDIT MENU.**
- The On Screen Display disappears.



Insert, AV Insert Editing and Audio Dubbing

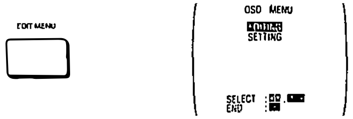
Example: Insert Editing
AV Insert Editing and Audio Dubbing are also performed using the same procedure.

Preparation

- Make the necessary connections. See page 33.
- Insert a recorded cassette into the playback VTR, and a cassette with an intact erasure prevention tab into the recording VTR.
- Confirm that the TV is on.

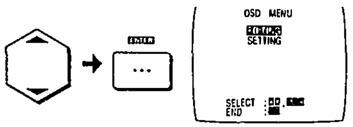
Operations **On Screen Display**

1


EDIT MENU
OSD MENU
EDITING
SETTING
SELECT
END

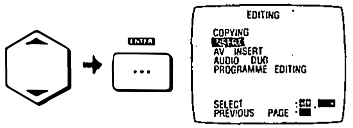
Press **EDIT MENU**.

2


ENTER
OSD MENU
EDITING
SETTING
SELECT
END

Select **EDITING**.

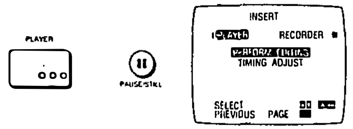
3


ENTER
EDITING
COPYING
INSERT
AV INSERT
AUDIO DUB
PROGRAMME EDITING
SELECT
PREVIOUS PAGE

Select **INSERT**.

- If the playback VTR receives no input signals, the On Screen Display may disappear.
  In such a case, follow the next step and then the On Screen Display will appear.

4

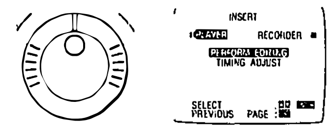

PLAYER
PAUSE/STILL
INSERT
PLAYER
RECORDER
PERFORM EDITING
TIMING ADJUST
SELECT
PREVIOUS PAGE

Press **PLAYER** and **PAUSE/STILL**.

- The picture from the playback VTR appears on the screen.

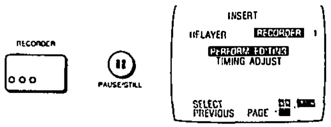
Operations **On Screen Display**

5


INSERT
PLAYER
RECORDER
PERFORM EDITING
TIMING ADJUST
SELECT
PREVIOUS PAGE

Search for the edit start point on the playback VTR.

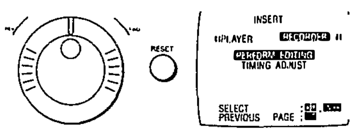
6


RECORDER
PAUSE/STILL
INSERT
PLAYER
RECORDER
PERFORM EDITING
TIMING ADJUST
SELECT
PREVIOUS PAGE

Press **RECORDER** and **PAUSE/STILL**.

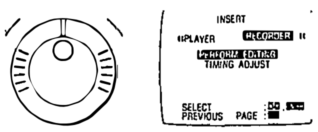
- The picture from the recording VTR appears on the screen.

7


RESET
INSERT
PLAYER
RECORDER
PERFORM EDITING
TIMING ADJUST
SELECT
PREVIOUS PAGE

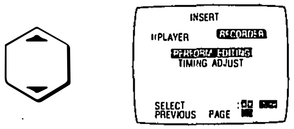
Search for the edit end point on the recording VTR and press **RESET**.

8


INSERT
PLAYER
RECORDER
PERFORM EDITING
TIMING ADJUST
SELECT
PREVIOUS PAGE

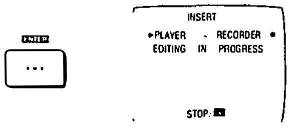
Search for the edit start point on the recording VTR.

9


INSERT
PLAYER
RECORDER
PERFORM EDITING
TIMING ADJUST
SELECT
PREVIOUS PAGE

Select **PERFORM EDITING**.

10


ENTER
INSERT
PLAYER
RECORDER
EDITING IN PROGRESS
STOP

Press **ENTER**.

- Editing begins.
- Editing will finish when the counter reaches 0 00.00.

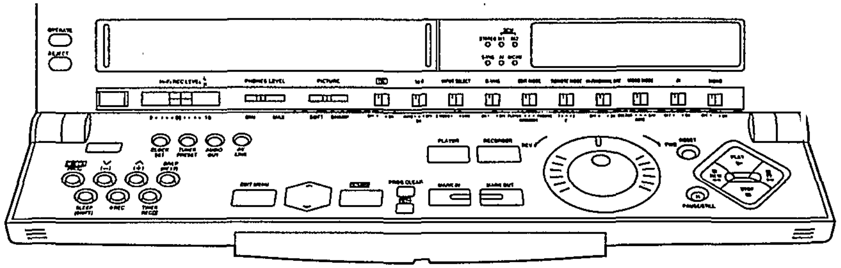
11

Press **EDIT MENU**.

- The On Screen Display disappears.

Note:
If the VITC function is activated, RESET is not operative. In such a case, turn off the VITC function.

Programme Editing



Assemble Editing

By setting the edit start point and end point on the playback VTR, along with the edit start point on the recording VTR, assemble editing of up to 10 scenes can be performed automatically.

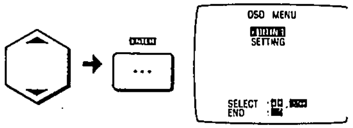
Preparation

- Make the necessary connections. See page 33.
- nsert a recorded cassette into the playback VTR, and a cassette with an intact erasure prevention tab into the recording VTR.
- Confirm that the TV s on.

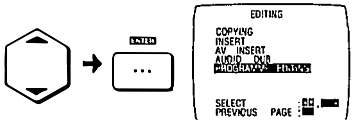
Operations **On Screen Display**

1

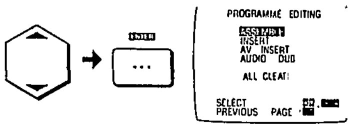
Press **EDIT MENU**.

2 
ENTER
OSD MENU
EDITING
SETTING
SELECT
END

Select **EDITING.**

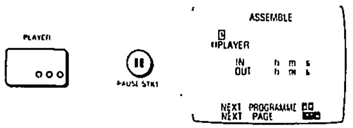
3 
ENTER
EDITING
COPYING
INSERT
AV INSERT
AUDIO DUB
PROGRAMME EDITING
SELECT
PREVIOUS PAGE

Select **PROGRAMME EDITING**

4 
ENTER
PROGRAMME EDITING
ASSEMBLE
INSERT
AV INSERT
AUDIO DUB
ALL CLEAR
SELECT
PREVIOUS PAGE

Select **ASSEMBLE.**

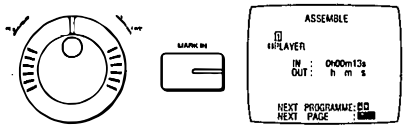
- f the playback VTR receives no nput signals, the On Screen Display may disappear. In such a case, follow the next step and then the On Screen Display will appear.

5 
PLAYER
PAUSE/STILL
ASSEMBLE
1
PLAYER
IN h m s
OUT h m s
NEXT PROGRAMME
NEXT PAGE

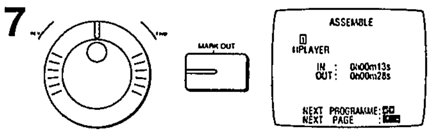
Press **PLAYER** and **PAUSE/STILL**

- The picture from the playback VTR appears on the screen.

Operations **On Screen Display**

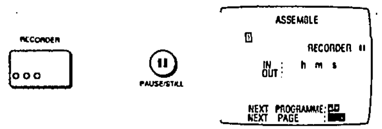
6 
MARK IN
ASSEMBLE
1
PLAYER
IN : 0h00m13s
OUT : h m s
NEXT PROGRAMME :
NEXT PAGE :

Search for the edit start point on the playback VTR and press **MARK IN**

7 
MARK OUT
ASSEMBLE
1
PLAYER
IN : 0h00m13s
OUT : 0h00m28s
NEXT PROGRAMME :
NEXT PAGE :

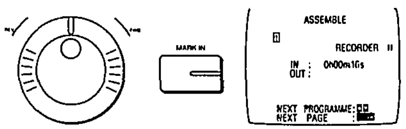
Search for the edit end point on the playback VTR and press **MARK OUT.**

- If there s more than one programme, select a programme number using ▼ and ▲, and repeat steps 6 and 7.

8 
RECORDER
PAUSE/STILL
ASSEMBLE
1
RECORDER II
IN : h m s
OUT :
NEXT PROGRAMME :
NEXT PAGE :

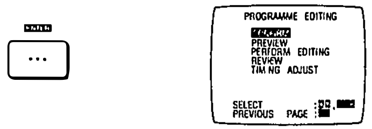
Press **RECORDER** and **PAUSE/STILL.**

- The picture from the recording VTR appears on the screen.

9 
MARK IN
ASSEMBLE
1
RECORDER II
IN : 0h00m16s
OUT :
NEXT PROGRAMME :
NEXT PAGE :

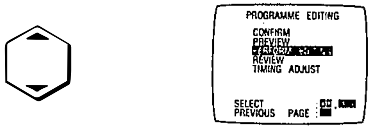
Search for the edit start point on the recording VTR and press **MARK IN.**

- Step 9 need not be performed when a non-recorded cassette is used.

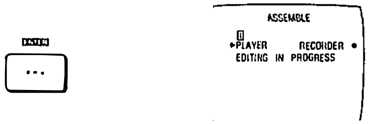
10 
ENTER
PROGRAMME EDITING
CONFIRM
PREVIEW
PERFORM EDITING
REVIEW
TIMING ADJUST
SELECT
PREVIOUS PAGE

Press **ENTER.**

- The edit start point and the edit end point are memorized.

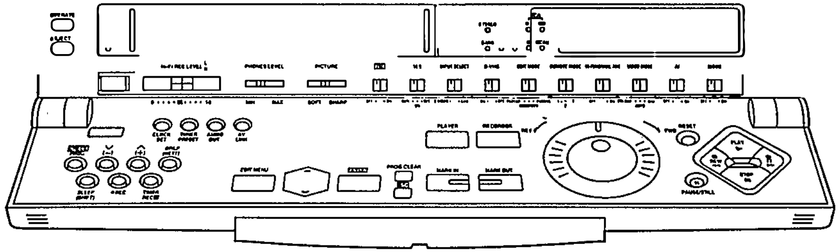
11 
PROGRAMME EDITING
CONFIRM
PREVIEW
PERFORM EDITING
REVIEW
TIMING ADJUST
SELECT
PREVIOUS PAGE

Select **PERFORM EDITING.**

12 
ENTER
ASSEMBLE
1
PLAYER
RECORDER ●
EDITING IN PROGRESS

Press **ENTER.**

- Editing begins.
- After editing of all programmes s completed, the both VTRs stop n still playback mode.



Insert, AV Insert Editing and Audio Dubbing

There are 2 types of programme.
To insert only a particular portion:
Set the edit start point and end point on the playback VTR, and the edit start point on the recording VTR.
To insert within fixed limits:
Set the edit start point on the playback VTR, and the edit start and end point on the recording VTR.

- If four points are set, insertion will end when the first end point is reached.

Example: Insert Editing
AV Insert Editing and Audio Dubbing are also performed using the same procedure.

Preparation

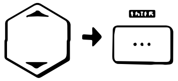
- Make the necessary connections. See page 33.
- Insert a recorded cassette into the playback VTR, and a cassette with an intact erasure prevention tab into the recording VTR.
- Confirm that the TV is on.

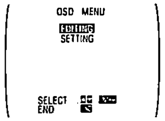
Operations	**On Screen Display**	

1

Press **EDIT MENU**

2

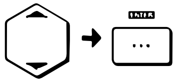


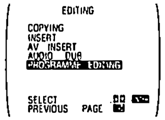


OSD MENU
EDITING
SETTING
SELECT
END

Select **EDITING.**

3

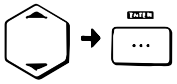


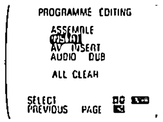


EDITING
COPYING
INSERT
AV INSERT
AUDIO DUB
PROGRAMME EDITING
SELECT
PREVIOUS PAGE

Select **PROGRAMME EDITING.**

4





PROGRAMME EDITING
ASSEMBLE
INSERT
AV INSERT
AUDIO DUB
ALL CLEAR
SELECT
PREVIOUS PAGE

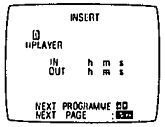
Select **INSERT**

- If the playback VTR receives no input signals, the On Screen Display may disappear.
  In such a case, follow the next step and then the On Screen Display will appear.

Operations	**On Screen Display**	

5

PLAYER
PAUSE/STILL

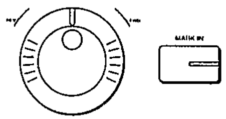


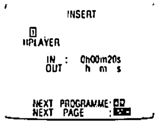
INSERT
PLAYER
IN h m s
OUT h m s
NEXT PROGRAMME
NEXT PAGE :

Press **PLAYER** and **PAUSE/STILL.**

- The picture from the playback VTR appears on the screen.

6

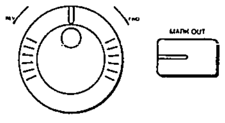


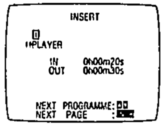


INSERT
PLAYER
IN : 0h00m20s
OUT h m s
NEXT PROGRAMME:
NEXT PAGE :

Search for the edit start point on the playback VTR and press **MARK IN.**

7





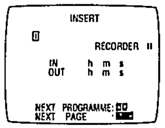
INSERT
PLAYER
IN 0h00m20s
OUT 0h00m30s
NEXT PROGRAMME:
NEXT PAGE :

Search for the edit end point on the playback VTR and press **MARK OUT.**

- This step is not necessary if the end point on the recording VTR has been set.

8

RECORDER
PAUSE/STILL

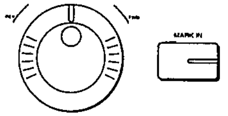


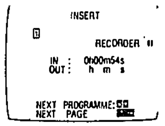
INSERT
RECORDER II
IN h m s
OUT h m s
NEXT PROGRAMME:
NEXT PAGE :

Press **RECORDER** and **PAUSE/STILL.**

- The picture from the recording VTR appears on the screen.

9

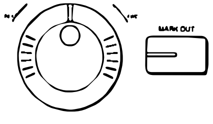


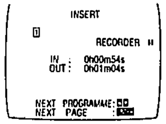


INSERT
RECORDER II
IN : 0h00m54s
OUT : h m s
NEXT PROGRAMME:
NEXT PAGE

Search for the edit start point on the recording VTR and press **MARK IN.**

10



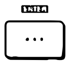


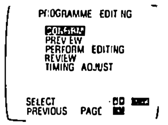
INSERT
RECORDER II
IN : 0h00m54s
OUT : 0h01m04s
NEXT PROGRAMME:
NEXT PAGE :

Search for the edit end point on the recording VTR and press **MARK OUT.**

- This step is not necessary if the end point on the playback VTR has been set.
- If there is more than one programme, select a programme number using ▼ and ▲, and repeat steps 5 to 10.

11





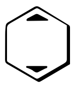
PROGRAMME EDITING
CONFIRM
PREVIEW
PERFORM EDITING
REVIEW
TIMING ADJUST
SELECT
PREVIOUS PAGE

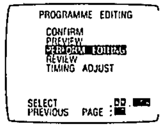
Press **ENTER**

- The edit start point and the edit end point are memorized.

Operations **On Screen Display**

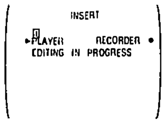
12




PROGRAMME EDITING
CONFIRM
PREVIEW
PERFORM EDITING
REVIEW
TIMING ADJUST
SELECT
PREVIOUS PAGE

Select PERFORM EDITING.
- If a programme is not correct, it will appear on the screen. Set the edit start and end points correctly.
- To see a preview before performing editing, select **PREVIEW**. See page 48.

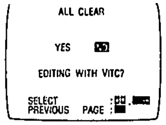
13


INSERT
PLAYER
RECORDER
EDITING IN PROGRESS

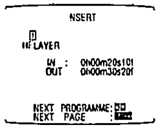
Press ENTER.
- Editing begins.
- After editing of all programmes is completed, the both VTRs stop in still playback mode.

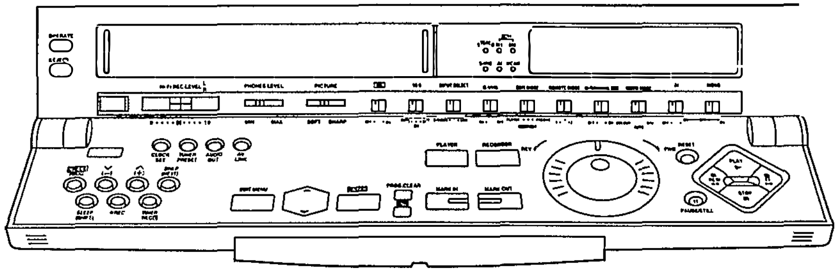
Notes for Programme Editing:
- For the edit start point, use a location which is at least 10 seconds from the beginning of the tape. Otherwise, the programme will not be executed.
- Programme editing can be suspended in mid-execution by pressing ESC. As a result, however, the picture immediately after suspending may disappear.
- Programmes are stored even after editing is completed. Unless they are cancelled, programmes are stored even after the power has been turned off.
- Programme editing can not be performed with a movie camera that has a 4-digit counter.
  The following movie cameras will not work in the programme editing mode with this VTR.
  VHS full movies: NV-M10E, NV-M25E, NV-M40E,
  NV-MS4E
  VHS-C movies NV-MS90E
  (As of April 1994)

When the VITC function is on:
- If the programme on the normal counter has been stored, the On Screen Display shown below may appear after step 3.
  If editing is to be performed using the VITC function, select **YES** to cancel all the editing programmes.
  (When the VITC function is off, the On Screen Display shown below will appear if the programme with the time code has been stored.)


ALL CLEAR
YES
EDITING WITH VITC?
SELECT
PREVIOUS PAGE

- When **MARK IN** or **MARK OUT** is pressed, the time code is displayed on the screen in increments of hours, minutes, seconds and frames (25 frames per second).

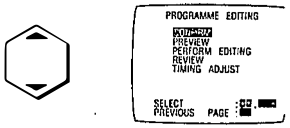

INSERT
PLAYER
IN : 0h00m20s10f
OUT : 0h00m30s20f
NEXT PROGRAMME
NEXT PAGE



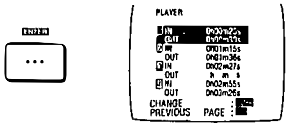
Other Editing Functions

To confirm and Change Editing Programmes

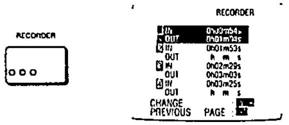
1 Select **CONFIRM** after setting the edit start and end points.


PROGRAMME EDITING
CONFIRM
PREVIEW
PERFORM EDITING
REVIEW
TIMING ADJUST
SELECT
PREVIOUS PAGE

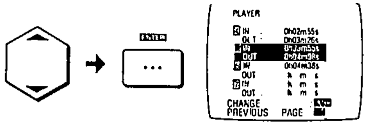
2 Press **ENTER**.
- The programme list for the playback VTR is displayed.


ENTER
PLAYER
IN
OUT
IN 0h01m15s
OUT 0h01m36s
IN 0h02m27s
OUT h m s
IN 0h02m55s
OUT 0h03m26s
CHANGE
PREVIOUS PAGE

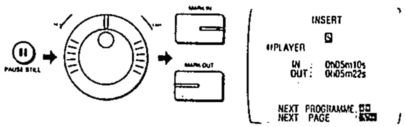
3 Press **RECORDER** to confirm the programmes on the recording VTR.
- Press **PLAYER** to return to the programme list on the playback VTR.


RECORDER
RECORDER
IN
OUT 0h01m29s
IN 0h01m53s
OUT h m s
IN 0h02m29s
OUT 0h03m03s
IN 0h03m25s
OUT h m s
CHANGE
PREVIOUS PAGE

4 Select the programme to be changed.


ENTER
PLAYER
IN 0h02m55s
OUT 0h03m26s
IN
OUT 0h04m08s
IN 0h04m38s
OUT h m s
IN h m s
OUT h m s
CHANGE
PREVIOUS PAGE

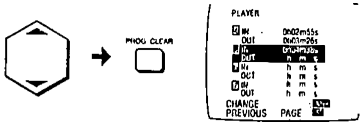
5 Search for the start or end point to be changed and press **MARK IN** or **MARK OUT**.

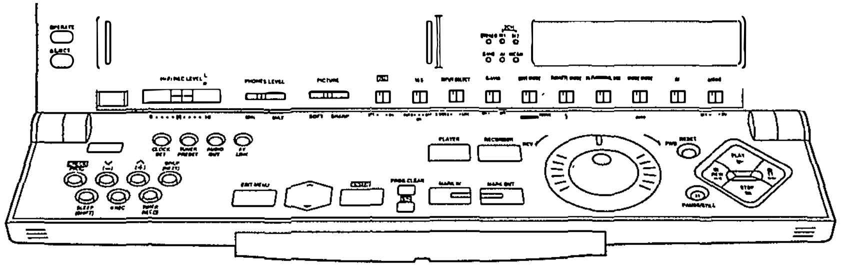

PAUSE STILL
MARK IN
MARK OUT
INSERT
PLAYER
IN : 0h05m10s
OUT : 0h05m22s
NEXT PROGRAMME
NEXT PAGE

6 Press **ENTER**.

To cancel an Editing Programme

In step 4 above, select the programme to be canceled and press **PROG. CLEAR**.

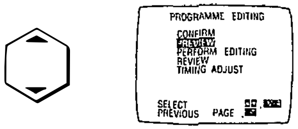

PROG. CLEAR
PLAYER
IN 0h02m55s
OUT 0h03m26s
IN
OUT h m s
IN h m s
OUT h m s
IN h m s
OUT h m s
CHANGE
PREVIOUS PAGE



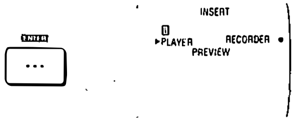
Preview Function

Before performing actual editing, this function allows confirmation of editing operations without recording.

1 Select **PREVIEW** after setting the edit start and end points.


PROGRAMME EDITING
CONFIRM
PREVIEW
PERFORM EDITING
REVIEW
TIMING ADJUST
SELECT
PREVIOUS PAGE

2 Press **ENTER**.
- Preview begins.

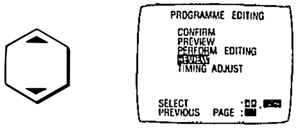

ENTER
INSERT
▶PLAYER RECORDER
PREVIEW

Notes:
- Preview function works only when this VTR is used as the recording VTR.
- Preview function does not work during assemble editing.

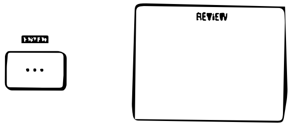
Review Function

After editing has been completed, this function plays back from the edit start point to the edit end point on the recording VTR.

1 Select **REVIEW** after performing editing.


PROGRAMME EDITING
CONFIRM
PREVIEW
PERFORM EDITING
REVIEW
TIMING ADJUST
SELECT
PREVIOUS PAGE

2 Press **ENTER**.
- Review begins.


ENTER
REVIEW

Edit Timing Adjustment

When performing editing in conjunction with a unit which has a different mechanism, there may be a lag in the edit start point due to a deviation between the time a pause cancellation signal is received by the recording unit and the time recording actually begins.
Edit Timing Adjustment is used to compensate the edit start and end time in light of this start-up time deviation.

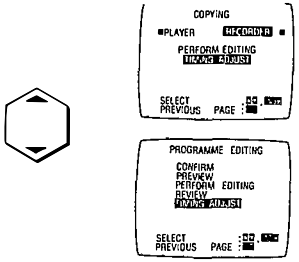
1 Record the second hand on a stopwatch with a movie camera.

2 Insert this recorded cassette into the playback unit, and a cassette with an intact erasure prevention tab into the recording VTR.

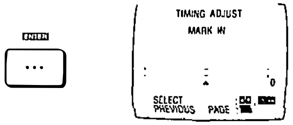
3 Using the point where the second hand reaches zero as the edit start point, perform copying.

4 Play back the copied tape, and check how many seconds had elapsed at the recording start point.
- If timing is correct, recording should begin at exactly zero seconds.

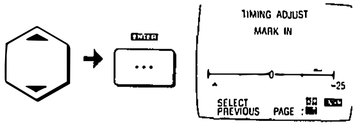
5 Select **TIMING ADJUST** from the screen below.


COPYING
PLAYER RECORDER
PERFORM EDITING
TIMING ADJUST
SELECT
PREVIOUS PAGE
PROGRAMME EDITING
CONFIRM
PREVIEW
PERFORM EDITING
REVIEW
TIMING ADJUST
SELECT
PREVIOUS PAGE

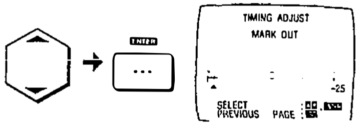
6 Press **ENTER**.


ENTER
TIMING ADJUST
MARK IN
0
SELECT
PREVIOUS PAGE

7 Adjust the timing for the start point by setting the amount of the discrepancy of the second hand.
- The setting is displayed in frame (¹⁄₂₅ of a second) units. Thus if, for example, one second had elapsed, set to −25.
- Corrections can be made in the range of ±30 frames (1.2 second).


ENTER
TIMING ADJUST
MARK IN
-25
SELECT
PREVIOUS PAGE

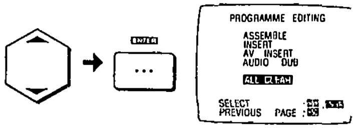
8 Adjust the timing for the end point in the same manner.


ENTER
TIMING ADJUST
MARK OUT
-25
SELECT
PREVIOUS PAGE

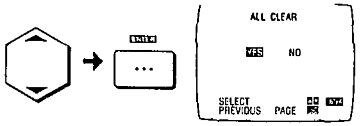
Note:
Edit timing adjustment function only works during programme editing.

To cancel All Editing Programmes

1 Select **ALL CLEAR** from the screen below.


ENTER
PROGRAMME EDITING
ASSEMBLE
INSERT
AV INSERT
AUDIO DUB
ALL CLEAR
SELECT
PREVIOUS PAGE

2 Select **YES**
- All programmes will be canceled.


ENTER
ALL CLEAR
YES NO
SELECT
PREVIOUS PAGE

Editing when not Using an Edit Cable

To connect a VTR or Movie Camera without an Edit Socket and use This VTR as the Recording VTR

- Connect the AV1 socket on this VTR to the TV.
- Connect the AV2 socket or the AUDIO/VIDEO/S-VIDEO IN (AV3) sockets on this VTR to the playback unit.
- Select A2 or A3 by pressing ∧ ∨ on this VTR.

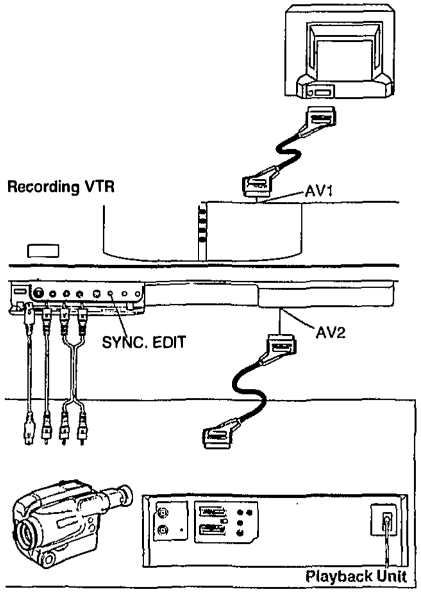
A2: Through the AV2 socket

A3: Through the AV3 sockets on front panel
  Set **INPUT SELECT** on this VTR.
  S-VIDEO: Through the S-VIDEO IN and AUDIO IN sockets
  LINE: Through the VIDEO IN and AUDIO IN sockets

- Set **EDIT MODE** on this VTR to RECORDER.
- Control is performed by the respective units.

Preparation

- Make the necessary connections.
- Insert a recorded cassette into the playback unit, and a cassette with an intact erasure prevention tab into the recording VTR.
- Confirm that the TV is on.


Recording VTR
AV1
SYNC. EDIT
AV2
Playback Unit

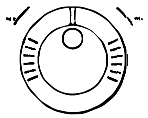
Assembly Editing

Operations

1 Press **PAUSE/STILL** on the recording VTR.

PAUSE/STILL

2 Search for the end of the previous recording.



3 Press **REC** to set for the new recording.

4 Start playback on the playback unit.

5 Press **PAUSE/STILL** again to start the new recording.

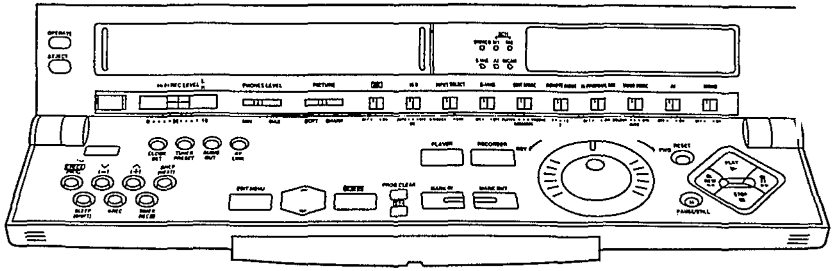
PAUSE/STILL

6 Press **STOP** to stop recording.

Synchronized Editing

By connecting a VTR or movie camera with synchronized editing capability to this VTR using a synchro connection cord (optional), it is possible to synchronize the playback start and stop of the playback unit with the recording start and stop of this VTR.

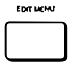
1. Put the recording VTR into the recording pause mode by pressing **REC** and **PAUSE/STILL**.
2. Put the playback unit into the still playback mode at the point where editing is to begin.
3. Press **PAUSE/STILL** on the recording VTR.
   - The playback unit switches over to the playback mode, and copying begins automatically.



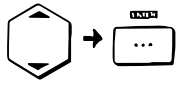
Insert Editing, AV Insert Editing and Audio Dubbing

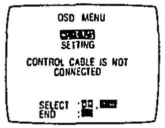
Operations **On Screen Display**

1 Press **EDIT MENU**.



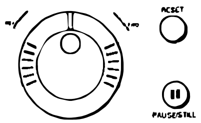
2 Select **EDITING**.

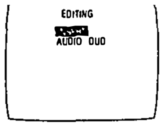



OSD MENU
EDITING
SETTING
CONTROL CABLE IS NOT CONNECTED
SELECT
END

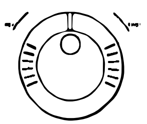
3 Press **PAUSE/STILL** and search for the edit end point, and press **RESET**.

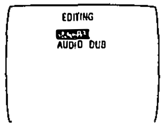
- It is not required for audio dubbing to search for the edit end point and reset.


RESET
PAUSE/STILL


EDITING
INSERT
AUDIO DUB

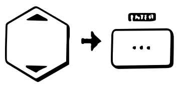
4 Search for the edit start point.

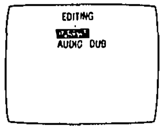



EDITING
INSERT
AUDIO DUB

5 Select **INSERT** or **AUDIO DUB**.

- AV Insert editing is selected if both **AUDIO DUB** and **INSERT** are selected.
- If once selected, Insert or Audio Dubbing mode is still active even if the On Screen Display disappears by pressing **EDIT MENU**.



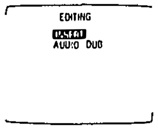

EDITING
INSERT
AUDIO DUB

6 Start playback on the playback unit.

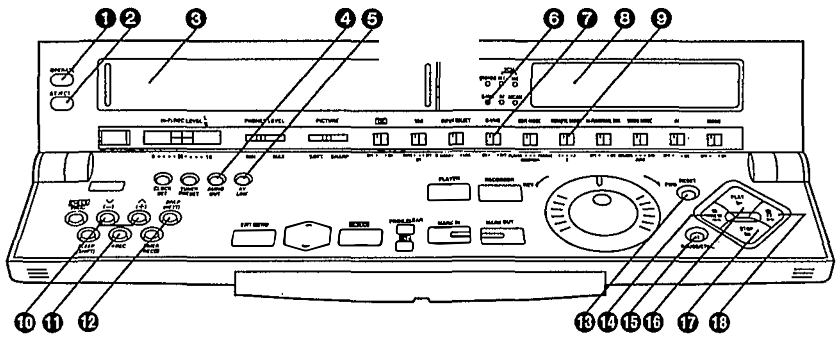
7 Press **PAUSE/STILL**.

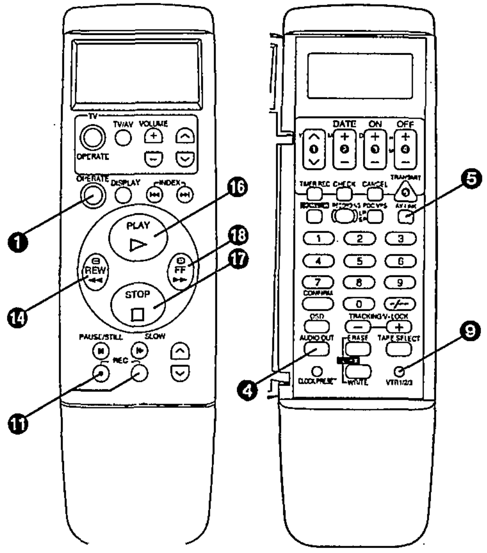
- Editing begins.
- Insert and AV Insert editing will finish when the counter reaches 0:00.00
- Press **STOP** to stop audio dubbing.

PAUSE/STILL


EDITING
INSERT
AUDIO DUB

Controls and Connection Sockets





Basic Controls

① **OPERATE**
To turn the VTR on and off.

② **EJECT**
To eject a video cassette.

③ **Cassette Compartment**
Insert a video cassette here.

④ **AUDIO OUT**
To select the desired sound mode.
At the every push of this button, the audio output mode changes as follows.

→Stereo→Left→Right→Normal audio track┐

The Left and Right Indicators show which sound mode is selected in the following way.

Stereo:	Both the Left and Right Indicators are lit.
Left:	The Left Indicator is lit.
Right:	The Right Indicator is lit.
Normal:	Both the Left and Right Indicators are not lit.

⑤ **AVLINK**
To select the VTR mode or TV mode for AV LINK.

⑥ **S-VHS Indicator**
Lights up when the S-VHS switch is set to ON.

⑦ **S-VHS**
When recording on an S-VHS cassette tape, select the desired recording format with this switch.
ON: The recording will be made in the S-VHS format.
- The S-VHS indicator lights up.

OFF: The recording will be made in the VHS format.
- The S-VHS indicator does not light up.
(It is possible to make a recording on an S-VHS cassette tape in the VHS format, for example, in order to play back the tape on another VHS VTR.)

- When using VHS cassettes, the recording is made in the VHS format irrespective of the position to which this switch is set.
- For playback, it is not necessary to operate this switch.
- When a tape which was recorded in the S-VHS format is played back on a conventional VHS VTR, it is not possible to obtain playback picture.

⑧ **Display**

⑨ **REMOTE MODE (VTR1/2/3)**

VTR1:	Set to this position on both the VTR and remote controller for normal use with one VTR.
VTR2:	Set to this position when using two Panasonic VTRs.
VTR3:	Set to this position when using three Panasonic VTRs.

This allows the remote controller to be set for operating VTR1, VTR2 or VTR3.

⑩ ∨ (−) ∧ (+)
To select the required programme position (TV station).
To set the clock and timer recording.

⑪ **REC**
To start a recording.

⑫ **SP/LP (NEXT)**
To select the tape speed required for recording.
SP gives the best picture quality.
LP gives the longest recording time.
To proceed to the next item during setting procedure.

⑬ **RESET**
To reset the tape counter (elapsed time) to "0:00.00".
- The tape counter is automatically reset to "0 00.00" when a video cassette is inserted.

⑭ **REW (REWIND)**

In the stop mode:	To rewind the tape.
In the playback mode:	To search backward.
In the rewind mode:	To obtain high speed picture.

"◁◁" is lit.

⑮ **PAUSE/STILL**

In the stop mode:	Still picture (Jog/Shuttle mode)
During playback:	Still picture (Jog/Shuttle mode)
During recording:	To interrupt recording

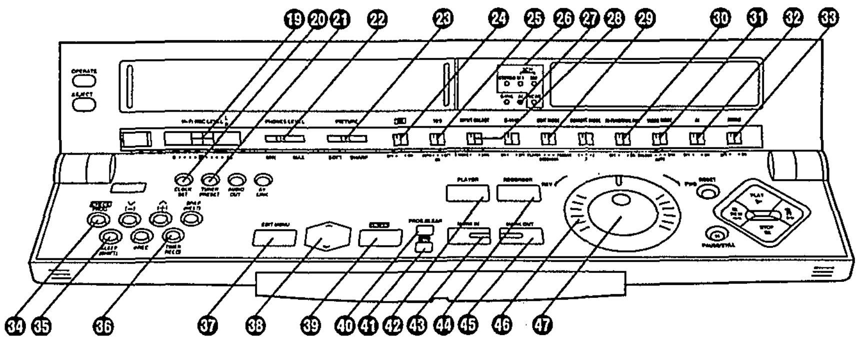
⑯ **PLAY**
To start playback. "▷" is lit.

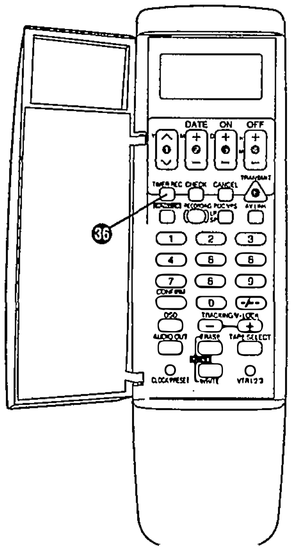
⑰ **STOP**
To stop any playback or recording.

⑱ **FF (FAST FORWARD)**

In the stop mode:	To fast forward the tape.
In the playback mode:	To search forward.
In the fast forward mode:	To obtain high speed picture.

"▷▷" is lit.





Advanced Controls

⑲ **H -FI REC LEVEL**
To adjust the recording level to peak at +4 dB on the recording level indicator.

⑳ **CLOCK SET**
To set the time.

㉑ **TUNER PRESET**
To initiate TV station settings for the tuner.

㉒ **PHONES LEVEL**
For adjusting the volume level of connected stereo headphones.

㉓ **PICTURE**
To make picture sharper (SHARP) or softer (SOFT).

㉔ **TBC**
When the tape in the cassette is loose or damaged, or when the tape movement is unstable during recording or playback the playback picture may shake from side to side and the picture may become distorted. In this case, activate the Time Base Corrector by setting the TBC Switch to ON, and the picture will become stable and the shaking will be minimized.
- For normal use, set the TBC Switch to OFF.
- During playback of some pre-recorded tapes, the tape may shake vertically. In such a case, set the TBC Switch to OFF.
- This function only works during normal playback n the PAL system.

㉕ **16:9**
AUTO: For automatically identifying the pictures as 16:9 pictures or 4:3 pictures during recording and playback and showing them on the wide TV screen.
- Normally set at this position.

ON: For recording and playback in such a way that the pictures expanded to 16:9 are shown on the wide TV screen at all time.
OFF: For recording and playback n such a way that 4:3 pictures are shown on the wide or 4:3 TV screen at all times.

㉖ **Indicators for Stereo, Bilingual and NICAM Reception**
When receiving a TV programme, the type of sound system in which it is broadcast is automatically ndicated.

㉗ **AI Indicator**
Lights up when the AI function is on.

㉘ **INPUT SELECT**
When Recording via the AV3 sockets on the front panel, select A3 by pressing ∧ ∨ and set this switch to S-VIDEO or LINE.
S-VIDEO: Through the S-VIDEO IN and AUDIO IN sockets
LINE: Through the VIDEO IN and AUDIO IN sockets

㉙ **EDIT MODE**
PLAYER: When this VTR is used as the playback VTR during editing operations.
RECORDER: When this VTR is used as the recording VTR during editing operations.
- Normally set at this position.

PASSIVE: When operating this VTR using another VTR or an editing controller.
- The picture quality best suited for editing is selected.
- When setting at this position, operation will not be possible and the On Screen Display will not appear.

㉚ **H -FI/NORMAL MIX**
OFF: Normally set at this position to reproduce the better sound available from the Hi-Fi track.
ON: Both sound tracks (the Hi-Fi sound track and the normal sound track) are played back mixed together. Use this setting when playing back a cassette tape which has been insert edited or audio dubbed.

㉛ **VIDEO MODE**
COLOUR: When performing recording and playback n colour.
AUTO: The VTR automatically distinguishes between colour and black-and-white during recording and playback.
B/W: When performing recording and playback n black-and-white.

㉜ **AI**
ON: Using the AI function, recording and playback are performed in the state which achieves optimum picture quality in light of characteristics of a tape.
- The picture sharpness cannot be adjusted in this setting.

OFF: Turns off the AI function.

㉝ **MONO**
OFF: Normally set at this position.
ON: Only set at this position to record the normal sound during a stereo, bilingual or NICAM broadcast or if the stereo sound is distorted due to inferior reception conditions.

㉞ **CHECK/PROG**
To select a timer programme number.
"1, 2, 3... or 8" is lit.
To display details of preset timer recording.

㉟ **SLEEP (SHIFT)**
To set the time to turn off the VTR automatically.
To blank unoccupied programme position.

㊱ **TIMERREC**
To turn the timer recording function on and off.
⏲ is lit or not lit.
Once Operating timer recording function, the normal VTR operation is not possible unless this button is set to off.

㊲ **EDIT MENU**
To perform editing operations.

㊳ **▲▼**
To make selections from On Screen Display.

㊴ **ENTER**
To make selections from On Screen Display.

㊵ **PROG. CLEAR**
To cancel an editing programme.

㊶ **ESC**
To return to the previous page on the screen.
To stop editing.

㊷ **PLAYER**
To operate the playback VTR.

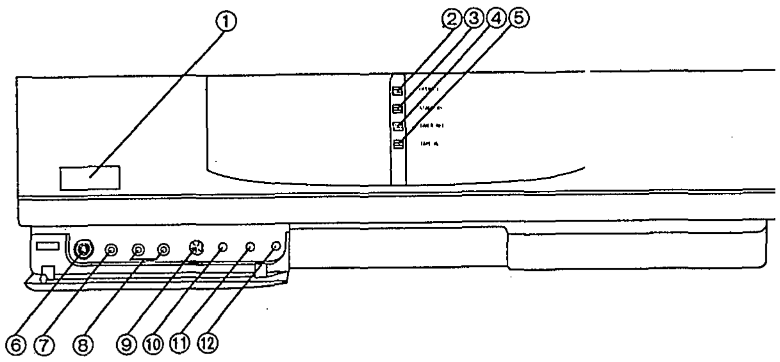
㊸ **MARK IN**
To set the edit start point.

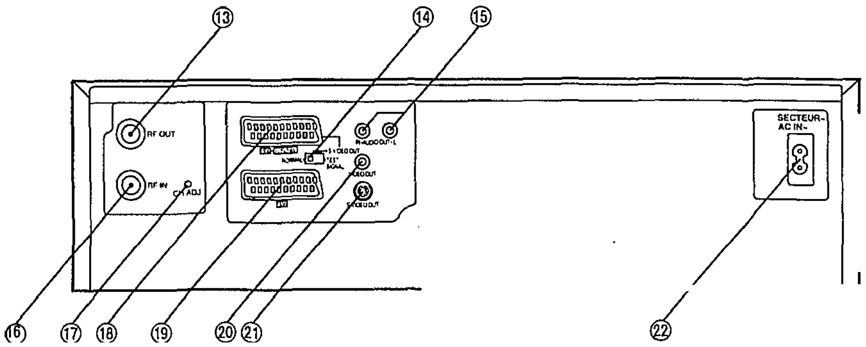
㊹ **RECORDER**
To operate the recording VTR.

㊺ **MARK OUT**
To set the edit end point.

㊻ **Shuttle Ring**
To adjust playback speed backward or forward.

㊼ **Jog Dial**
To locate any desired frame with utmost precision.





① **Infrared Remote Control Receiver Window**

② **OPERATE Indicator**
Lights up when the VTR is turned on.

③ **STAND BY Indicator**
Lights up when the AC mains lead is connected and the VTR is turned off.

④ **TIMER REC Indicator**
Lights up when the timer recording function is on.

⑤ **TAPE IN Indicator**
Lights up when a cassette is inserted.

⑥ **S-VIDEO IN (AV3)**
To connect the S-Video cable to a movie camera or to another VTR that has a S-Video output socket.

⑦ **VIDEO IN (AV3)**
To connect the video cable to a movie camera or to another VTR

⑧ **AUDIO IN (AV3)**
To connect the audio cable to a movie camera or to another VTR

⑨ **EDIT**
To connect a movie camera or another VTR equipped with an edit socket or an editing controller

⑩ **SYNC. EDIT**
To connect a movie camera or another VTR equipped with synchronized editing capability.

⑪ **MIC**
To connect a microphone for recording Once connected, this socket has priority.

⑫ **PHONES**
To connect stereo headphones.

⑬ **RF OUT**
To connect to the aerial terminal on a TV set

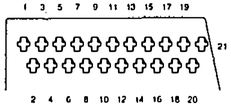
⑭ **NORMAL/S-VIDEO OUT/TEST SIGNAL**
NORMAL: Normally set to this position.
S-VIDEO OUT (AV1):
Set to this position when connecting the VTR to a TV set equipped with 21-pin Euro-AV Connector with pins for separate Y/C signal input.
TEST SIGNAL
Set to this position when tuning the TV into the VTR.
The test signal is transmitted on channel 36 and AV1

⑮ **AUD O OUT**
To connect the sound to a stereo audio system.

⑯ **RF IN**
To connect to the external aerial

⑰ **CH A DJ.**
To adjust the RF transmitting channel 32~40.

⑱ **AV1**
This 21-pin scart terminal carries input and output signals for both picture and sound TV sets equipped with a similar socket can be connected here
This is also called Scart
Peritel
Euro Connector
Euro AV



NORMAL (AV1/AV2)	S-VIDEO (AV1)
1 AUDIO OUTPUT CH2 (R)	1 AUDIO OUTPUT CH2 (R)
2 AUDIO INPUT CH2 (R)	2 AUDIO INPUT CH2 (R)
3 AUDIO OUTPUT CH1 (L)	3 AUDIO OUTPUT CH1 (L)
4 AUDIO GND	4 AUDIO GND
5 BLUE GND	5 No connection
6 AUDIO INPUT CH1 (L)	6 AUDIO INPUT CH1 (L)
7 BLUE	7 No connection
8 SWITCHING VOLTAGE	8 SWITCHING VOLTAGE
9 GREEN GND	9 No connection
10 No connection	10 No connection
11 GREEN	11 No connection
12 No connection	12 No connection
13 RED GND	13 No connection
14 BLANKING GND	14 No connection
15 RED	15 C OUT
16 BLANKING	16 No connection
17 VIDEO OUTPUTGND	17 VIDEO OUTPUTGND
18 VIDEO INPUTGND	18 No connection
19 VIDEO OUTPUT	19 Y OUT
20 VIDEO INPUT	20 VIDEO INPUT
21 GND	21 GND

Caution RGB reservation for only E/E operation when connecting the Pay TV decoder

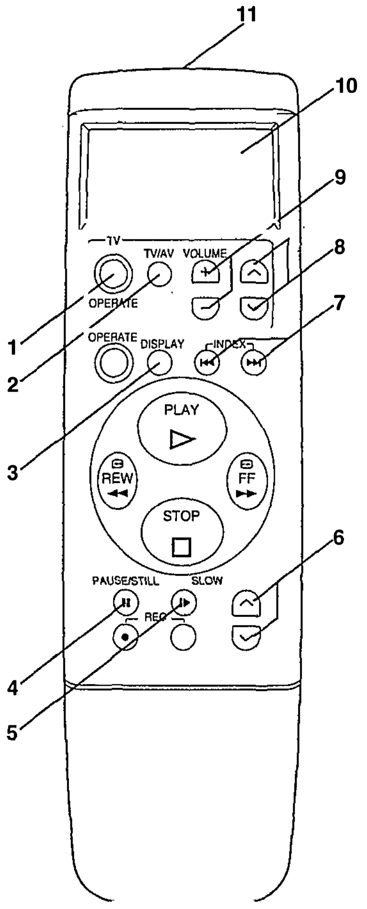
⑲ **AV2**
To connect to a decoder or another VTR
•Only used as the input socket

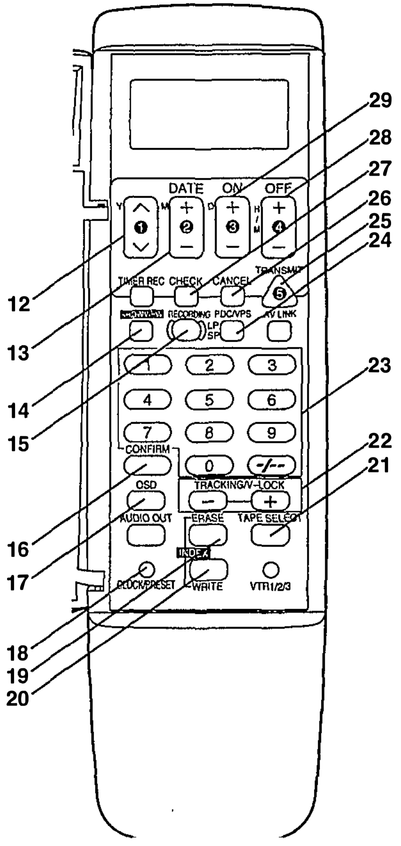
⑳ **VIDEO OUT**
To connect the video cable to a TV or another VTR.

㉑ **S-VIDEO OUT**
To connect the S-Video cable to a TV or another VTR that has a S-Video input socket

㉒ **AC IN~**
To connect to the main power supply

Infra-red Remote Controller


11
10
9
8
7
6
1
2
3
4
5
TV
TV/AV
VOLUME
OPERATE
OPERATE
DISPLAY
INDEX
PLAY
REW
FF
STOP
PAUSE/STILL
SLOW
REC


29
28
27
26
25
24
23
22
21
12
13
14
15
16
17
18
19
20
DATE
ON
OFF
TIMER REC
CHECK
CANCEL
TRANSMIT
RECORDING
PDC/VPS
AV LINK
LP
SP
1
2
3
4
5
6
7
8
9
0
-/--
CONFIRM
OSD
TRACKING/V-LOCK
AUDIO OUT
ERASE
TAPE SELECT
INDEX
CLOCK/PRESET
WRITE
VTR1/2/3

1 OPERATE (TV)
To turn the TV on and off.
- With some TV models, it may only be possible to turn the TV off using this button.

2 TV/AV
To select the TV input.

3 DISPLAY
To change the indication on the VTR Display.

→Clock→Counter→Remaining Tape Time→

4 PAUSE/STILL
During playback: Still picture
During recording: To interrupt recording

5 SLOW
To activate slow playback.

6 ∨∧ (VTR)
To select the required programme position (TV station) of the VTR.

7 INDEX
For the index search function.

8 ∨∧ (TV)
To select the required programme position (TV station) of the TV.

9 VOLUME
To adjust the volume of the TV.

10 Display

11 Infra-red Transmitter
The programming data are transmitted from here to the VTR.

12 ∧∨ (Y)
- To programme a timer recording.
- To set the clock.
- To preset the TV stations.

13 DATE (M)
- To programme a timer recording.
- To set the clock.

14 SHOWVIEW
For the ShowView programming.

15 RECORDING SP/LP
To select the tape speed desired for recording.

16 CONFIRM
To convert the data of a ShowView number.

17 OSD
For the On Screen Display Function.

18 CLOCK/PRESET
- To set the clock.
- To preset the TV stations.
- To set the manufacturer number of the TV.

19 ERASE
To erase Index Signals.

20 WRITE
To write Index Signals.

21 TAPE SELECT
To set the cassette tape length in order to obtain correct indication of the remaining tape time.
E195: For E30, -60, -80, -120, -180 and -195 tapes
E240: For E240 tape
E260: For E260 and -300 tapes

22 TRACKING/V-LOCK
For manual tracking adjustment
The + and – buttons are used to adjust the tracking when, for example, noise bars on the picture are better removed manually than by the automatic digital tracking control. After making a manual adjustment, press both buttons together to return to automatic digital tracking control.

For slow tracking adjustment
When noise bars appear during Still, Still Advance or Slow playback, switch over to slow playback and adjust with the + or – Button to reduce the noise bars.

For vertical locking adjustment
Use the + and – buttons to minimize any vertical jitter during still-picture playback.

23 Number Buttons
- To select the programme positions.

9: (9)

19: (-/--)→(1)→(9)

- To enter a ShowView number.

24 PDC/VPS
To turn the PDC/VPS function on and off.

25 TRANSMIT
To transmit the data that has been set on the remote controller to the VTR.

26 CANCEL
To cancel timer programmes.

27 CHECK
To check timer programmes.

28 OFF (H/M)
- To programme a timer recording.
- To set the clock.
- To preset the TV stations.
- To set the manufacturer number of the TV.

29 ON (D)
- To programme a timer recording.
- To set the clock.

SECTION 2
ADJUSTMENT PROCEDURES

2-1. DISASSEMBLY METHOD

2-1-1. DISASSEMBLY FLOW CHART

This flow chart indicates disassembly steps of the cabinet parts and the circuit boards in order to find the necessary items for servicing.
When reassembling, perform the steps in the reverse order.

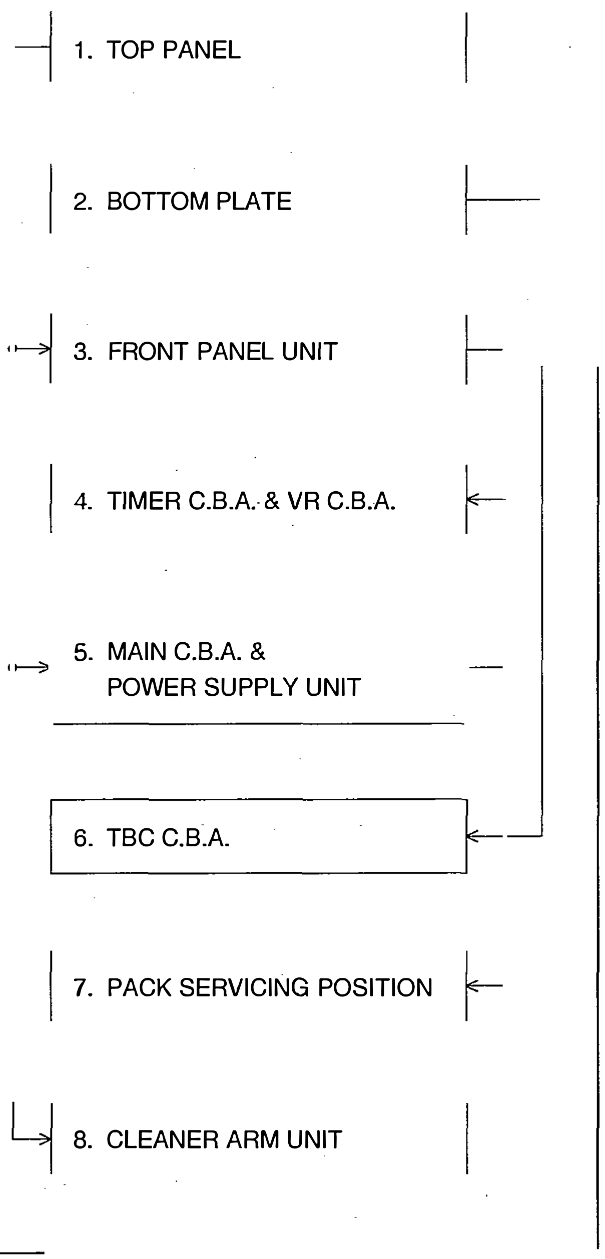

1. TOP PANEL
2. BOTTOM PLATE
3. FRONT PANEL UNIT
4. TIMER C.B.A. & VR C.B.A.
5. MAIN C.B.A. & POWER SUPPLY UNIT
6. TBC C.B.A.
7. PACK SERVICING POSITION
8. CLEANER ARM UNIT

Fig. D1

2-1-2. DETAIL OF DISASSEMBLY METHOD

1. REMOVAL OF THE TOP PANEL

Remove...... 4 Screws (A)

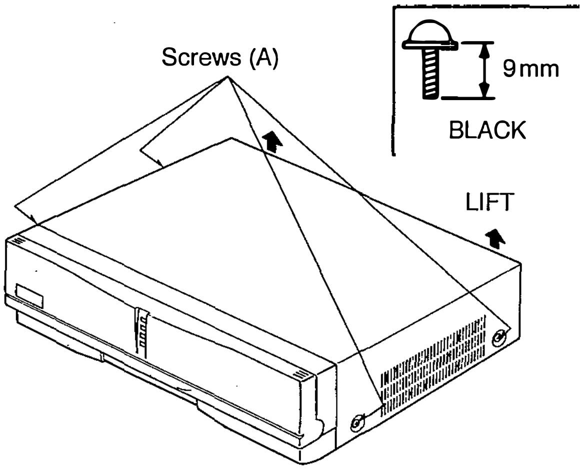

Screws (A)
9mm
BLACK
LIFT

Fig. D2

2. REMOVAL OF THE BOTTOM PLATE

Remove...... 6 Screws (B)

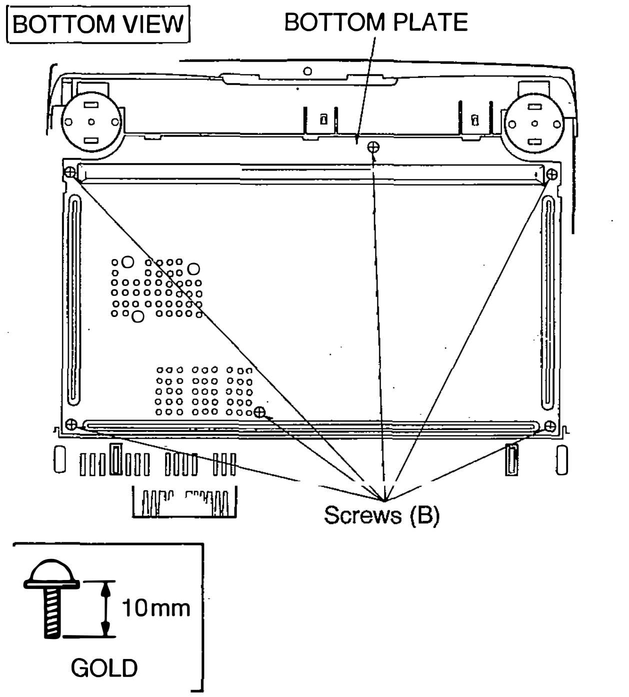

BOTTOM VIEW
BOTTOM PLATE
Screws (B)
10mm
GOLD

Fig. D3

3. REMOVAL OF THE FRONT PANEL UNIT

Remove...... Screws (C)
Unlock .... 8 Tabs (D)

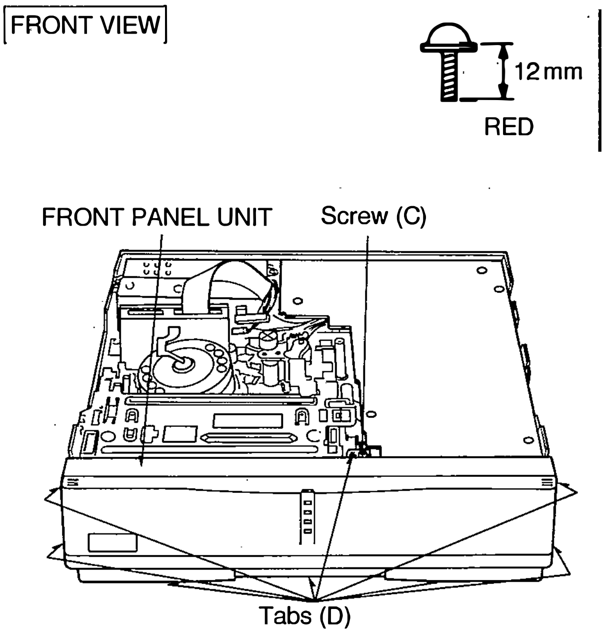

FRONT VIEW
12mm
RED
FRONT PANEL UNIT
Screw (C)
Tabs (D)

Fig. D4

4. REMOVAL OF THE TIMER C.B.A. & THE VR C.B.A.

Unlock .... 9 Tabs (F)

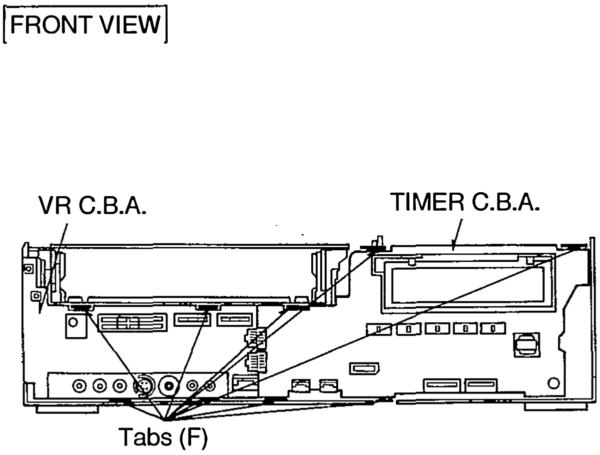

FRONT VIEW
VR C.B.A.
TIMER C.B.A.
Tabs (F)

Fig. D5

5. REMOVAL OF THE MAIN C.B.A. & THE POWER SUPPLY UNIT

REMOVAL OF THE MAIN C.B.A.

Remove...... 3 Screws (G)
Remove...... 2 Screws (H)
Unlock .... Tab (I)

REMOVAL OF THE POWER SUPPLY UNIT

Remove...... 2 Screws (J)
Remove...... Screws (K)
Unlock .... 2 Screws (L) and The HEAT SINK COVER
Remove......Screw (M) and The HEAT SINK

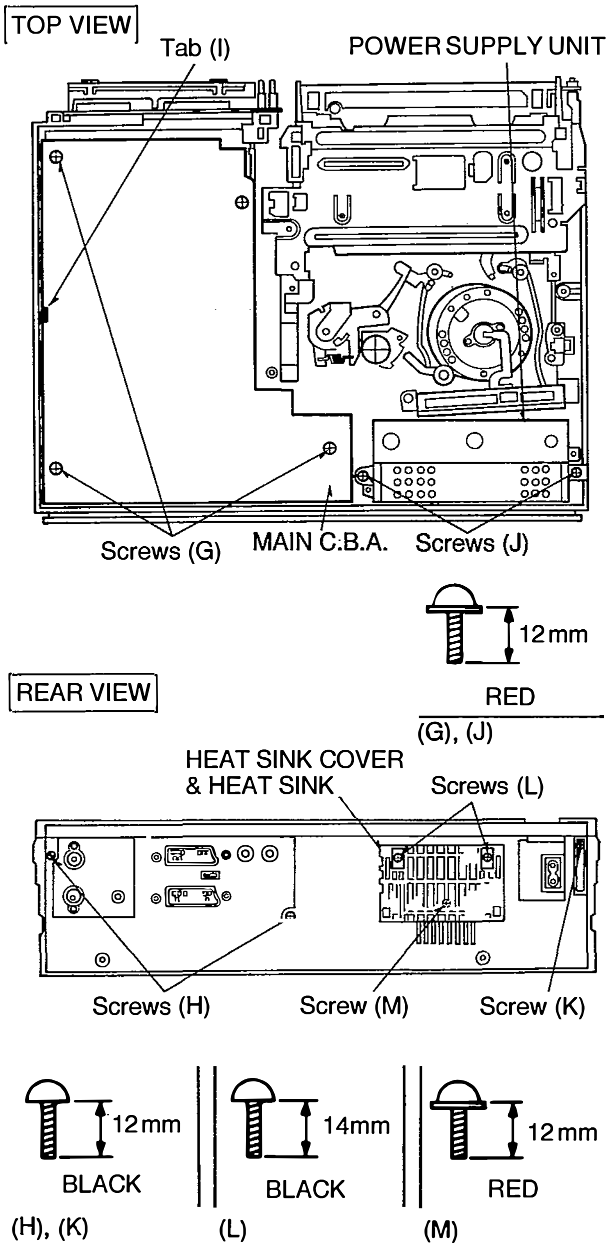

TOP VIEW
Tab (I)
POWER SUPPLY UNIT
Screws (G)
MAIN C.B.A.
Screws (J)
12mm
RED
(G), (J)
REAR VIEW
HEAT SINK COVER & HEAT SINK
Screws (L)
Screws (H)
Screw (M)
Screw (K)
12mm
BLACK
(H), (K)
14mm
BLACK
(L)
12mm
RED
(M)

Fig. D6

6. REMOVAL OF THE TBC C.B.A.

Remove...... 4 Screws (N)

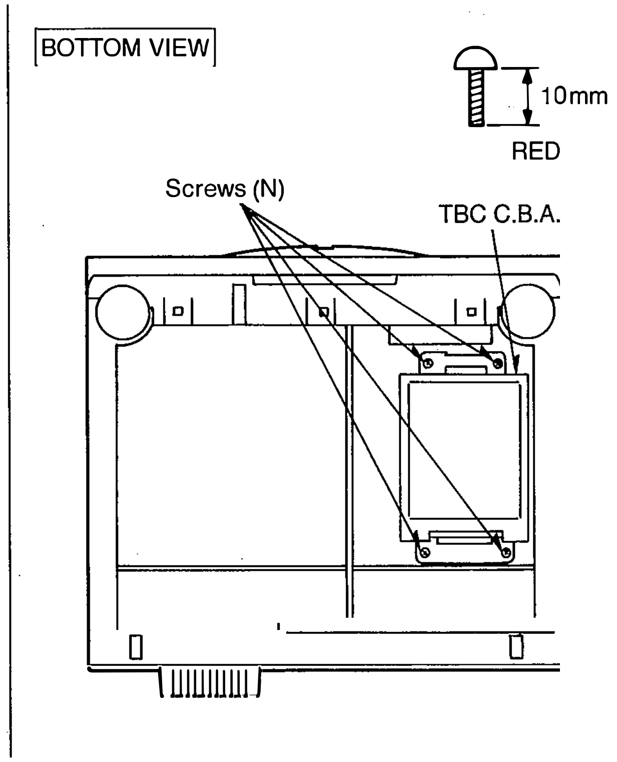

BOTTOM VIEW
10mm
RED
Screws (N)
TBC C.B.A.

Fig. D7

7. PACK SERVICING POSITION

CAUTION:
Confirm the isolation between Mechanical Chassis and Main C.B.A. before connecting Main AC.

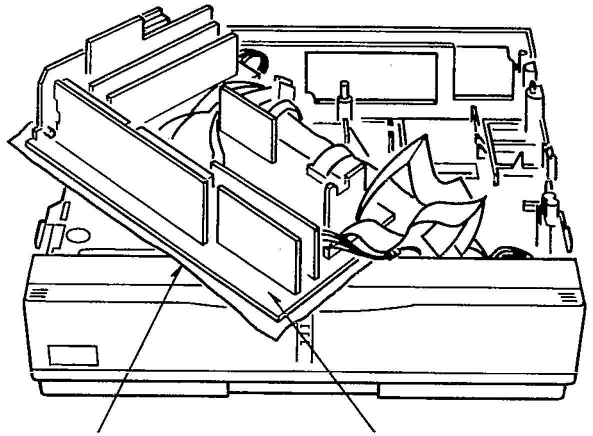

Insulation Sheet
MAIN C.B.A.

Fig. D8

8. REMOVAL OF THE CLEANER ARM UNIT

1. Unlock the locking portion (O).
2. Pull up the Cleaner Arm Unit.

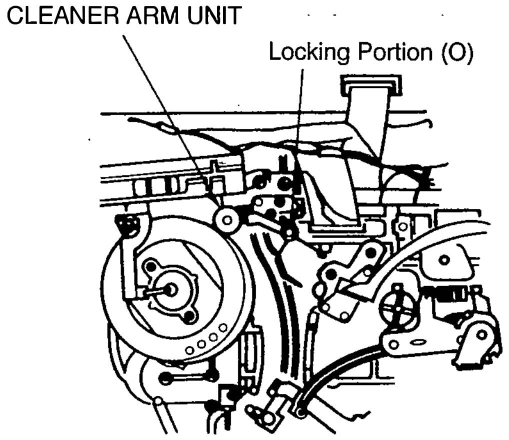

CLEANER ARM UNIT
Locking Portion (O)

Fig. D9

2-2. MECHANICAL ADJUSTMENT PROCEDURES

The mechanical chassis of this model is the K Mechanical Chassis.
Therefore refer to the Service Manual for K Mechanical Chassis. (Order No. VRD9307M131)

CAUTIONS:

To make a Adjustment Mode for Tape interchangeability, connect a Jumper wire which has been cut as shown in Fig. M1.
(Auto Tracking is turned off)
After finishing the adjustment, disconnect the jumper wire.

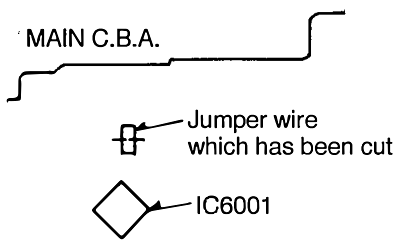

MAIN C.B.A.
Jumper wire
which has been cut
IC6001

Fig. M1

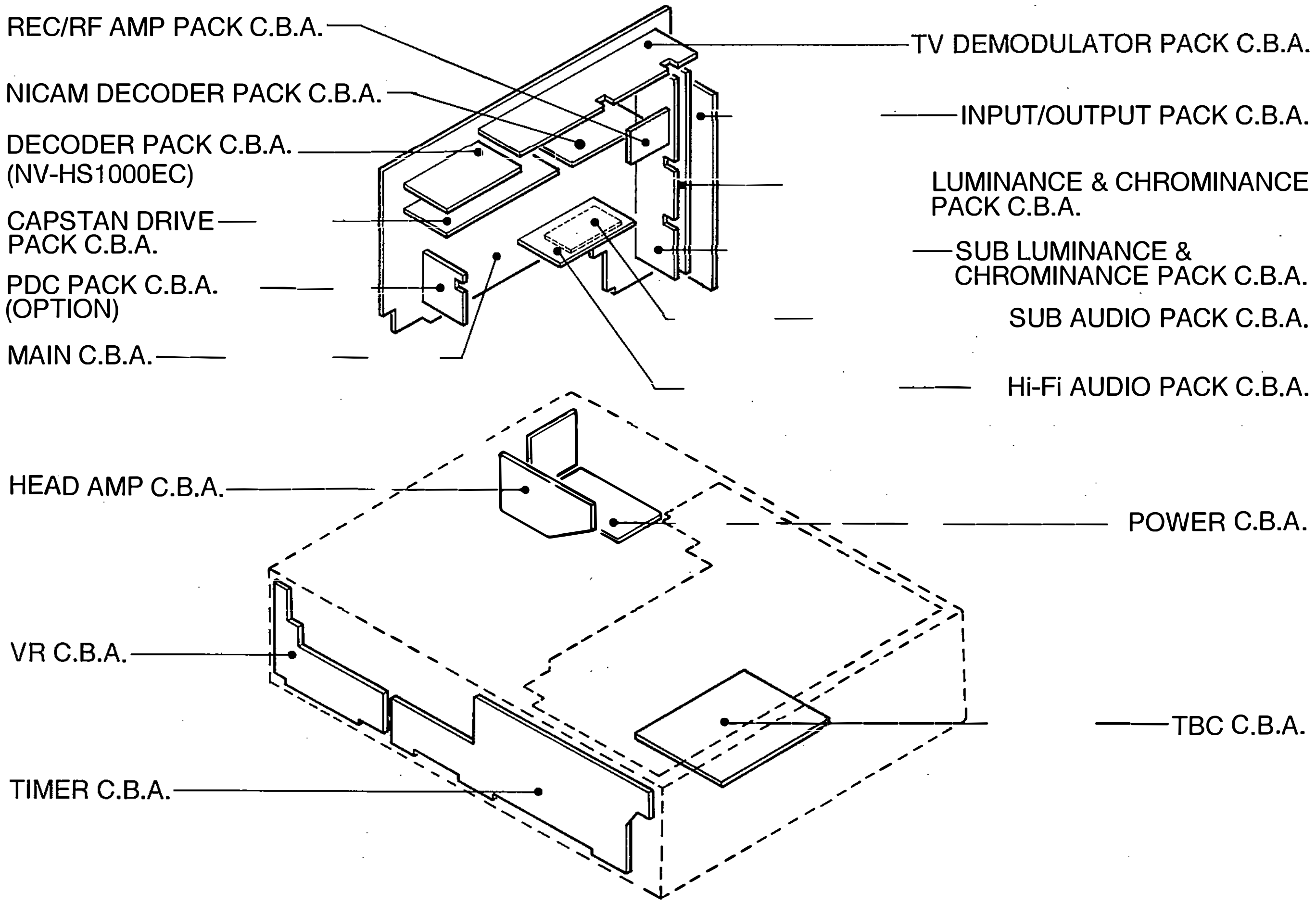
2-3. DISASSEMBLY PROCEDURES OF MECHANISM

The mechanical chassis of this model is the K Mechanical Chassis.
Therefore refer to the Service Manual for K Mechanical Chassis. (Order No. VRD9307M131)

2-4. ASSEMBLY PROCEDURES OF MECHANISM

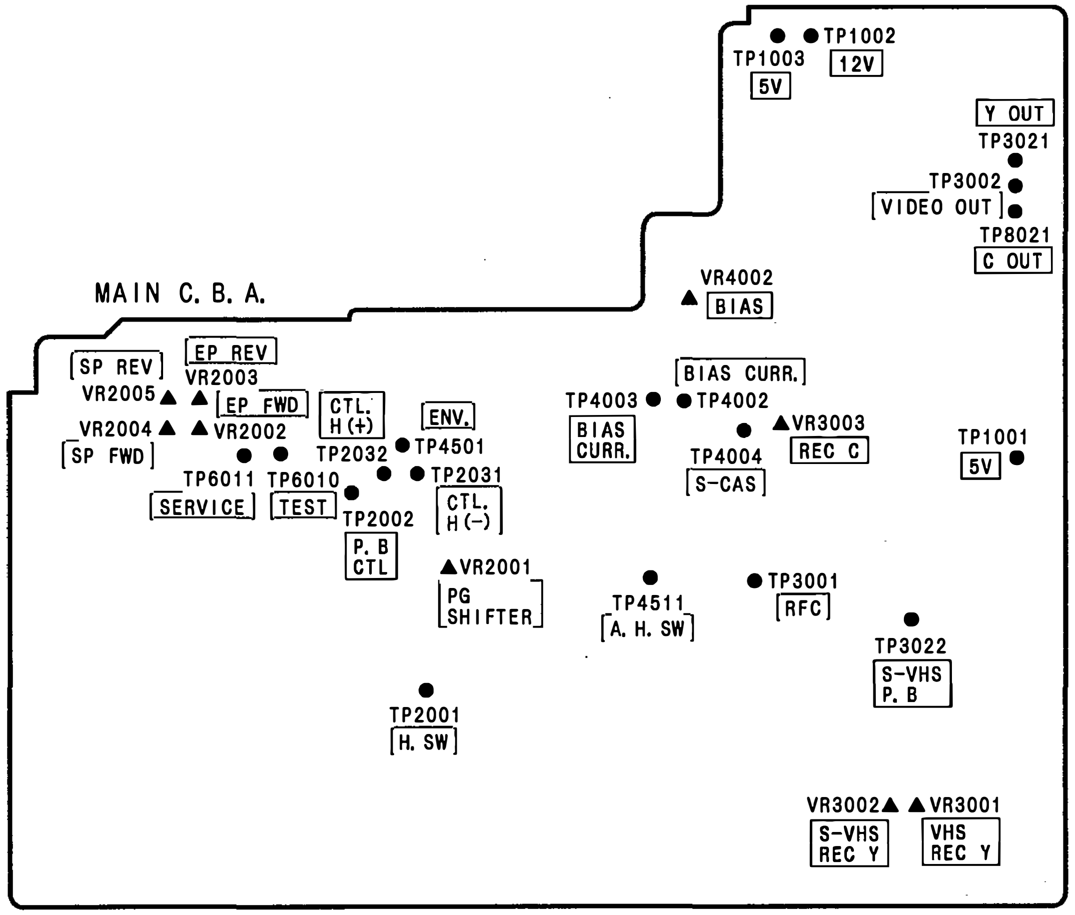
The mechanical chassis of this model is the K Mechanical Chassis.
Therefore refer to the Service Manual for K Mechanical Chassis. (Order No. VRD9307M131)

CIRCUIT BOARD LAYOUT

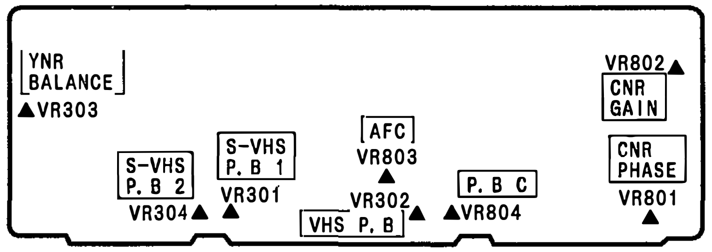

REC/RF AMP PACK C.B.A.
NICAM DECODER PACK C.B.A.
DECODER PACK C.B.A.
(NV-HS1000EC)
CAPSTAN DRIVE PACK C.B.A.
PDC PACK C.B.A.
(OPTION)
MAIN C.B.A.
TV DEMODULATOR PACK C.B.A.
INPUT/OUTPUT PACK C.B.A.
LUMINANCE & CHROMINANCE PACK C.B.A.
SUB LUMINANCE & CHROMINANCE PACK C.B.A.
SUB AUDIO PACK C.B.A.
Hi-Fi AUDIO PACK C.B.A.
HEAD AMP C.B.A.
POWER C.B.A.
VR C.B.A.
TBC C.B.A.
TIMER C.B.A.

LOCATION OF TEST POINTS & CONTROLS

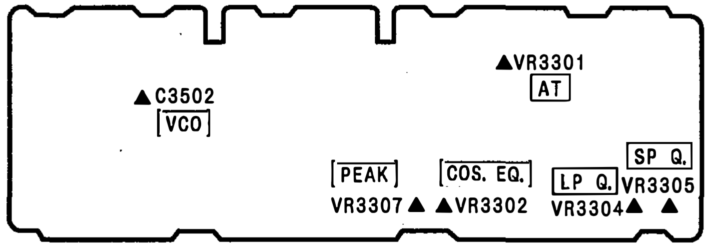
MAIN C. B. A.


TP1003
5V
TP1002
12V
Y OUT
TP3021
TP3002
VIDEO OUT
TP8021
C OUT
VR4002
BIAS
SP REV
EP REV
VR2003
VR2005
EP FWD
VR2004
VR2002
SP FWD
CTL. H(+)
ENV.
TP4501
TP2032
TP2031
CTL. H(-)
TP6011
SERVICE
TP6010
TEST
TP2002
P. B CTL
VR2001
PG SHIFTER
BIAS CURR.
TP4003
TP4002
BIAS CURR.
VR3003
REC C
TP4004
S-CAS
TP1001
5V
TP4511
A. H. SW
TP3001
RFC
TP3022
S-VHS P. B
TP2001
H. SW
VR3002
S-VHS REC Y
VR3001
VHS REC Y

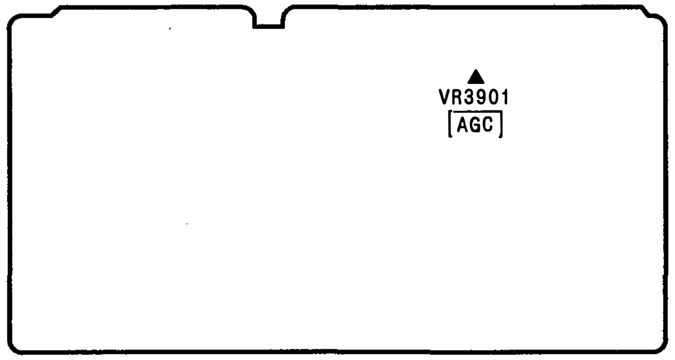
LUMINANCE & CHROMINANCE PACK C. B. A.


YNR BALANCE
VR303
S-VHS P. B 2
VR304
S-VHS P. B 1
VR301
AFC
VR803
VR302
VHS P. B
P. B C
VR804
VR802
CNR GAIN
CNR PHASE
VR801

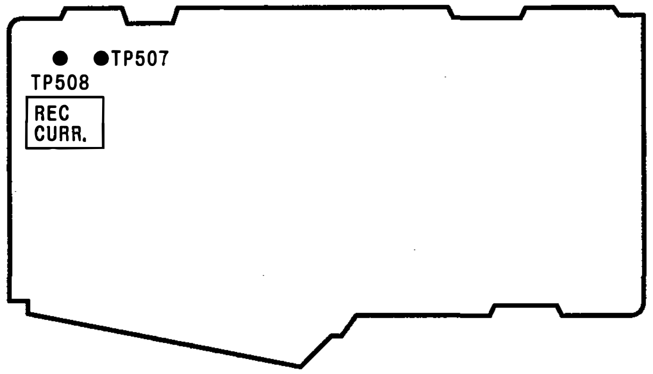
SUB LUMINANCE & CHROMINANCE PACK C. B. A.


C3502
VCO
VR3301
AT
PEAK
VR3307
COS. EQ.
VR3302
LP Q.
VR3304
SP Q.
VR3305

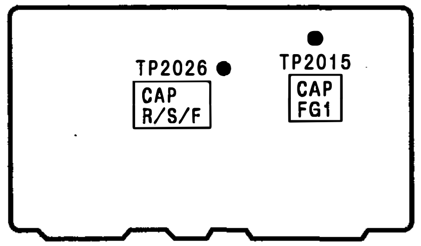
INPUT/OUTPUT PACK C. B. A.



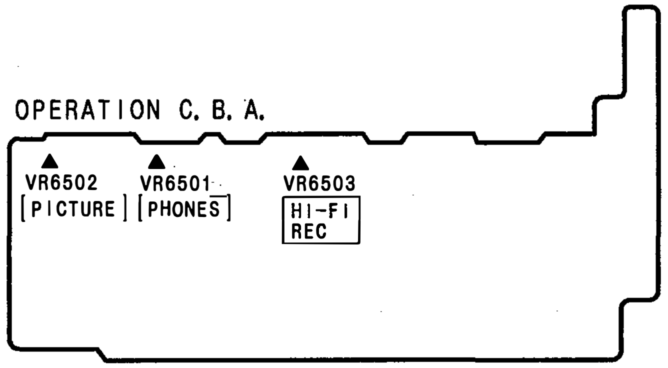
HEAD AMP C. B. A.


TP508
TP507
REC CURR.

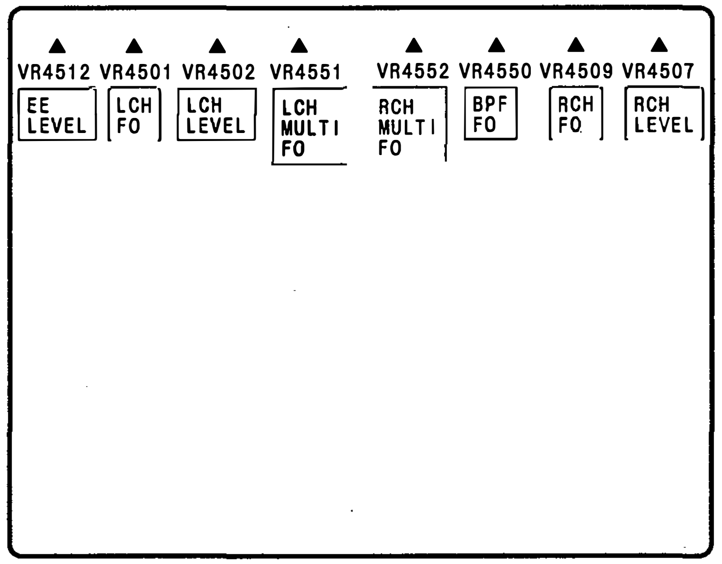
CAPSTAN DRIVE PACK C. B. A.


TP2026
CAP R/S/F
TP2015
CAP FG1

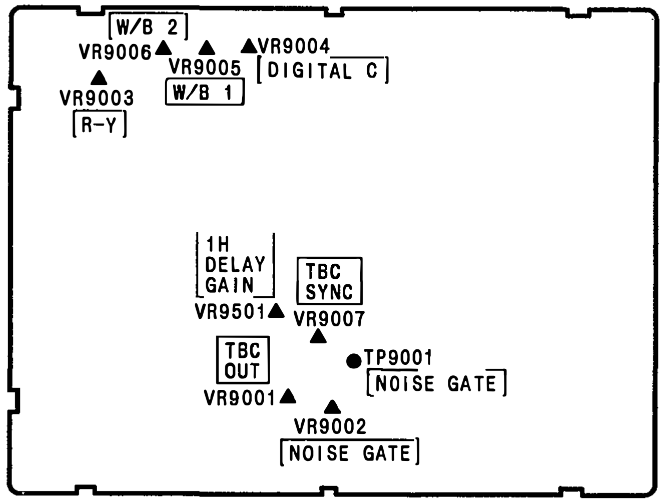
OPERATION C. B. A.


VR6502
PICTURE
VR6501
PHONES
VR6503
HI-FI REC

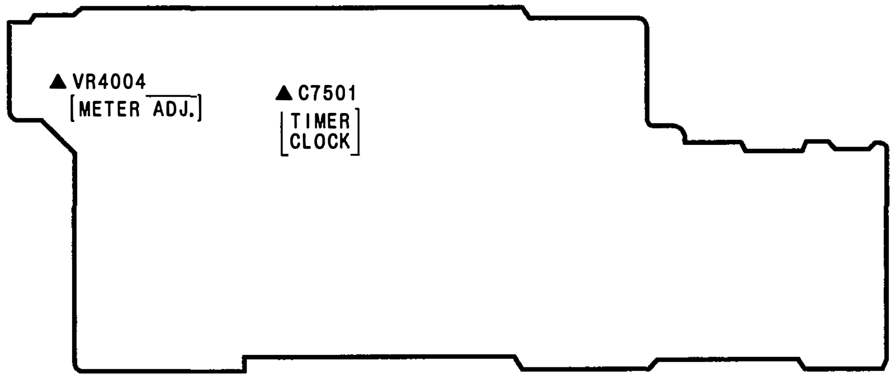
HI-FI AUDIO PACK C. B. A.


VR4512
EE LEVEL
VR4501
LCH FO
VR4502
LCH LEVEL
VR4551
LCH MULTI FO
VR4552
RCH MULTI FO
VR4550
BPF FO
VR4509
RCH FO
VR4507
RCH LEVEL

TBC C. B. A.


W/B 2
VR9006
VR9005
W/B 1
VR9004
DIGITAL C
VR9003
R-Y
1H DELAY GAIN
VR9501
TBC SYNC
VR9007
TBC OUT
VR9001
TP9001
NOISE GATE
VR9002
NOISE GATE

TIMER C. B. A.


VR4004
METER ADJ.
C7501
TIMER CLOCK

2-5. ELECTRICAL ADJUSTMENT PROCEDURES

This section provides complete adjustment procedures required for electric circuits of VHS Video Cassette Recorders.

2-5-1. TEST EQUIPMENT

To perform electrical adjustments following equipment is required.

1. Dual-Trace Oscilloscope. (More than 35 MHz)
   Voltage Range: 0.005-5V/div
   Frequency Range: DC-35 MHz
   Probes: 10:1 OR 1:1
2. Frequency Counter.
   Frequency Range: 0-10MHz
   Probes: 1:1
3. Universal Counter.
4. Digital Volt Meter. (D.V.M.)
5. Video Sweep Generator.
6. Sine Wave Generator.
7. Video Pattern Generator.
8. VHS Alignment Tape. (VFJ8125H3F)
9. VHS Blank Tape.
10. Monitor.
11. Plastic Tip Driver.
12. DC Power Supply.

2-5-2. PREPARATION

During adjustment, set each selector as follows: when no indication in the procedure.

NORMAL/Y/C/TEST SIGNAL SW (REAR)...NORMAL
VIDEO MODE SW..AUTO
AI SW..ON
EDIT MODE SW..RECORDER
HIFI/NORMAL MIX SW ....OFF
PICTURE VR..CENTRE FIX
HIFI REC LEVEL VR ....CENTRE FIX
CHANNEL...A1/A2/A3
(Set to signal input terminal number)
TBC SW..OFF
16:9 SW..AUTO
AV3 INPUT SELECT SW ....S-VIDEO/LINE
(Set to signal input terminal)
S-VHS SW...ON
MONO SW (NV-HS1000EC).........................OFF
NICAM/MONO SW (NV-HS1000B)..............NICAM

2-5-3. HOW TO READ ADJUSTMENT PROCEDURES

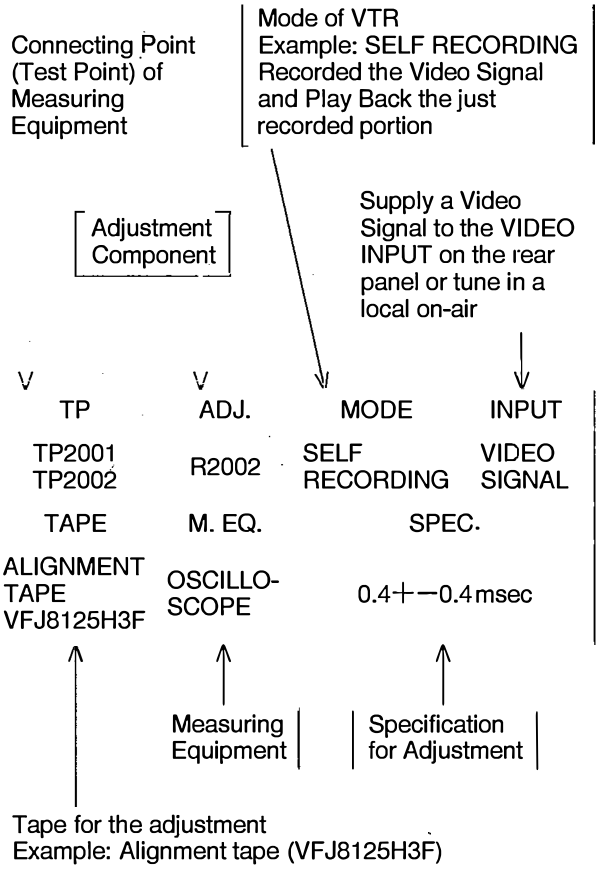

Connecting Point (Test Point) of Measuring Equipment
Mode of VTR
Example: SELF RECORDING
Recorded the Video Signal and Play Back the just recorded portion
Adjustment Component
Supply a Video Signal to the VIDEO INPUT on the rear panel or tune in a local on-air
TP
ADJ.
MODE
INPUT
TP2001
TP2002
R2002
SELF RECORDING
VIDEO SIGNAL
TAPE
M. EQ.
SPEC.
ALIGNMENT TAPE VFJ8125H3F
OSCILLO-SCOPE
0.4+−0.4msec
Measuring Equipment
Specification for Adjustment
Tape for the adjustment
Example: Alignment tape (VFJ8125H3F)

Fig. E1

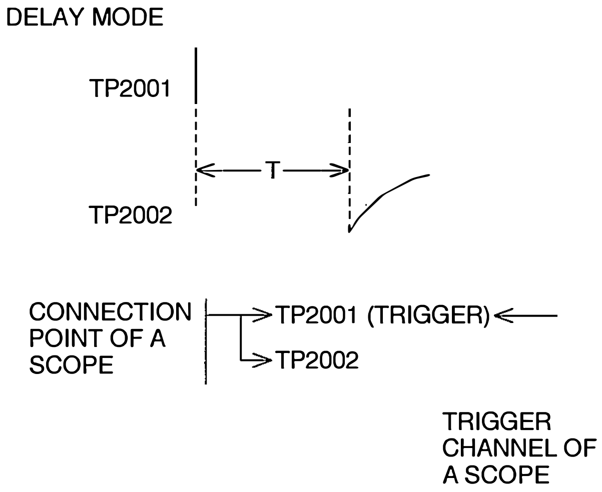

DELAY MODE
TP2001
T
TP2002
CONNECTION POINT OF A SCOPE
TP2001 (TRIGGER)
TP2002
TRIGGER CHANNEL OF A SCOPE

Fig. E2

SERVO SECTION

2-5-4. PG SHIFTER ADJUSTMENT

TP	ADJ.	MODE	INPUT
TP2001 (TEST LAND) VIDEO OUT	VR2001	PLAYBACK	

TAPE	M. EQ.	SPEC.
ALIGNMENT TAPE VFJ8125H3F	OSCILLO-SCOPE	8.0+−0.5 (H)

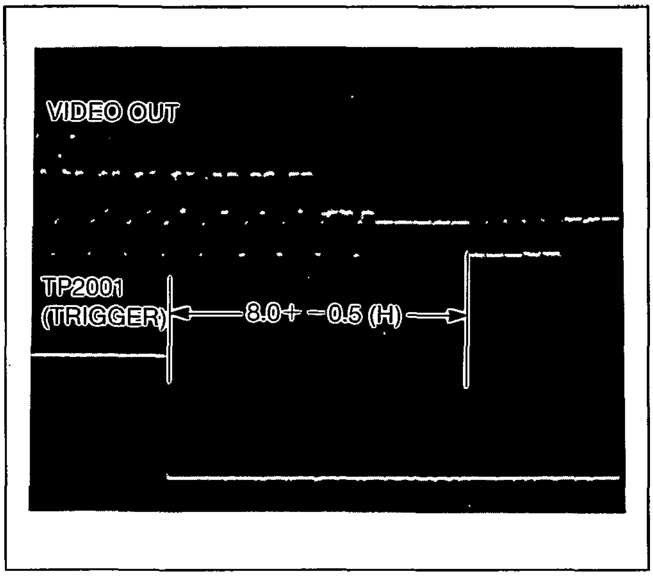


Fig. E3

2-5-5. SLOW TRACKING ADJUSTMENT

TP	ADJ.	MODE	INPUT
MONITOR SCREEN	VR2004 (SP) VR2002 (LP)	(SELF RECORDED) SLOW	CCIR PATTERN

TAPE	M. EQ.	SPEC.
BLANK TAPE	MONITOR TV	Noise bar on the monitor screen is minimized. (Shown in Fig. E5)

Note: 1. Before this adjustment, connect a jumper wire which has been cut as shown in Fig. E4.
2. After connecting a jumper wire, press the TRACKING (+) and (−) buttons on the Remote Controller simultaneously to set the tracking to centre fix position.
3. After this adjustment, disconnect a jumper wire.

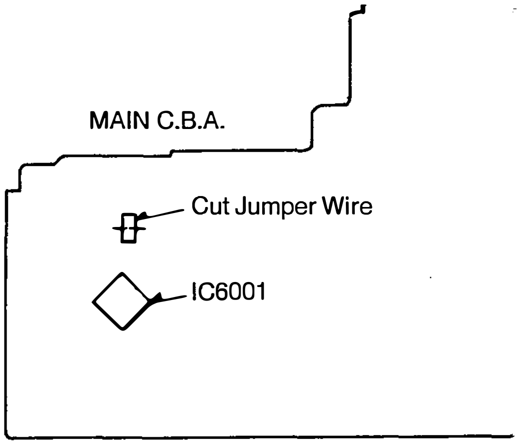


Fig. E4

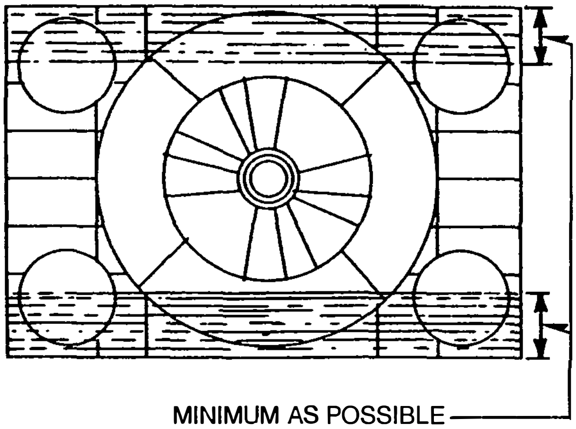


Fig. E5

2-5-6. REVERSE SLOW TRACKING ADJUSTMENT

TP	ADJ.	MODE	INPUT
MONITOR SCREEN	VR2005 (SP) VR2003 (LP)	(SELF RECORDED) REV SLOW	CCIR PATTERN

TAPE	M. EQ.	SPEC.
BLANK TAPE	MONITOR TV	Noise bar on the monitor screen is minimized. (Shown in Fig. E5)

REV SLOW: REVERSE SLOW

Note: 1. Before this adjustment, connect a jumper which has been cut as shown in Fig. E4.
2. After connecting a jumper wire, press the TRACKING (+) and (−) buttons on the Remote Controller simultaneously to set the tracking to centre fix position.
3. After this adjustment, disconnect a jumper wire.

2-5-7. AUTO TRACKING GAIN ADJUSTMENT

TP	ADJ.	MODE	INPUT
PP3011-1	VR3301	STOP	SINEWAVE 4MHz/200mVp-p (TO PP3011-2)

TAPE	M. EQ.	SPEC.
	SINEWAVE GENE./ D.V.M.	3.1+—0.1 (V)

Note: 1. After connecting the Sinewave Generator to PP3011-2, set the signal level to 4MHz/200mVp-p.

LUMINANCE & CHROMINANCE SECTION

2-5-8. ARTIFICIAL PAL FREE RUN ADJUSTMENT

TP	ADJ.	MODE	INPUT
IC802-9 (TL803)	VR803	STOP	

TAPE	M. EQ.	SPEC.
	FREQUENCY COUNTER/ SINEWAVE GENERATOR	15735+—100 (Hz)

Note: 1. Supply +5V DC to IC802-27 (TL802).
2. Turn VR803 to maximum frequency, then adjust VR803 until the specification.

2-5-9. RECORDING CURRENT ADJUSTMENT

TP	ADJ.	MODE	INPUT
TP507 (HOT) TP508 (GND)	VR3001 (VHS Y) VR3002 (S-VHS Y) VR3003 (C)	SP RECORDING	PAL COLOUR BAR

TAPE	M. EQ.	SPEC.
S-VHS BLANK TAPE	OSCILLO-SCOPE	VHS Y : 110+—5 (mVp-p) S-VHS Y: 120+—5 (mVp-p) C : 28+—2 (mVp-p)

Note: 1. Set the AI SW to OFF position.
2. When adjusting the S-VHS Luminance level, set the S-VHS SW to ON position.
3. When adjusting the VHS Luminance level, set the S-VHS SW to OFF position.
4. Adjust the Luminance level until the peak level of V-SYNC is 110+—5mVp-p (VHS MODE), 120+—5mVp-p (S-VHS MODE).
5. When adjusting the Chrominance level, Supply +5V DC to PP3001-6 (TL14) to eliminate Luminance component.

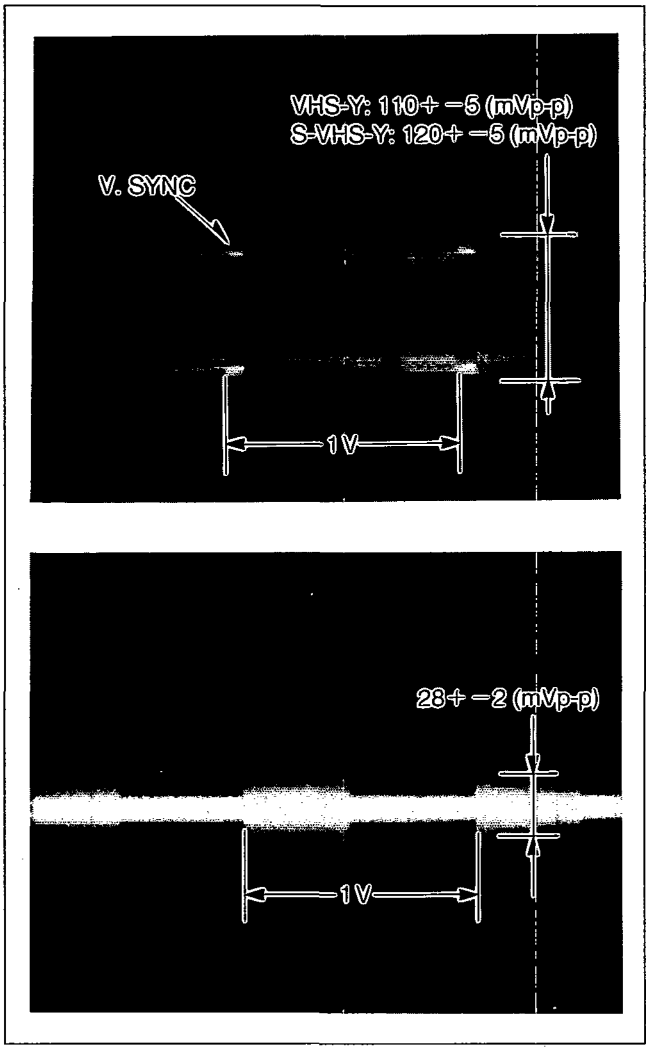


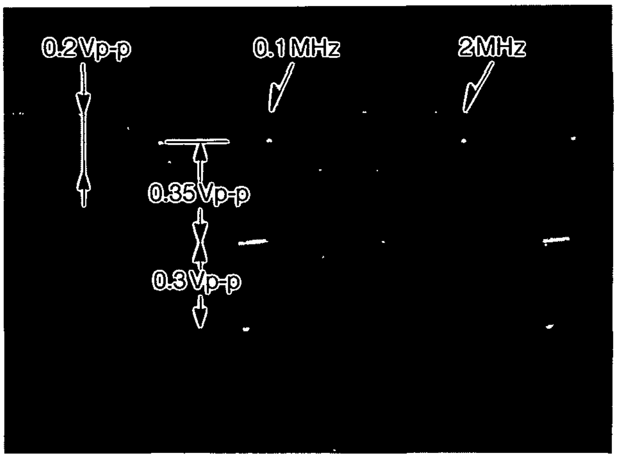
Fig. E6

2-5-10. VHS FREQUENCY RESPONSE ADJUSTMENT

TP	ADJ.	MODE	INPUT
VIDEO OUT	VR3305 (SP) VR3304 (LP)	SP/LP (SELF RECORDED) PLAYBACK	VIDEO SWEEP SIGNAL (Shown in Fig. E7)

TAPE	M. EQ.	SPEC.
BLANK TAPE	OSCILLO-SCOPE/ VIDEO SWEEP GENERATOR	SP: 0+−1(dB) (90−110%) LP: 0+−1(dB) (90−110%)

Note: 1. Set the Video Sweep Signal as shown in Fig. E7.
2. Set the AI and S-VHS SW to OFF position.
3. Set the VIDEO MODE SW to B/W position.



CONDITION: BURST SIGNAL OFF
75 ohm TERMINATED

Fig. E7

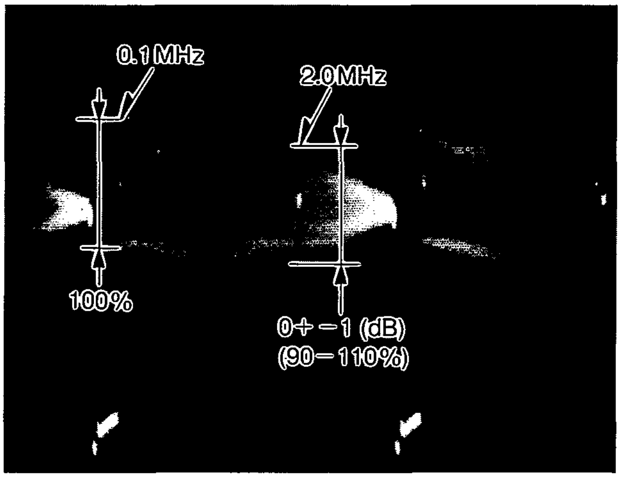


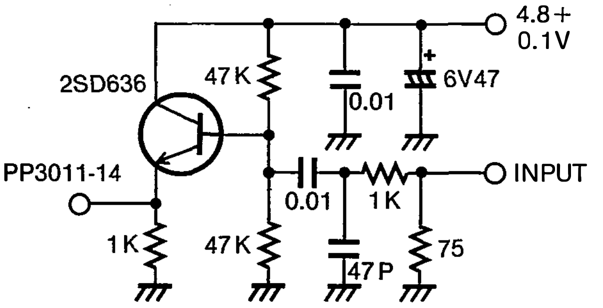
Fig. E8

2-5-11. RF PEAK FREQUENCY ADJUSTMENT

TP	ADJ.	MODE	INPUT
PP3011-18	VR3307	PLAYBACK	VIDEO SWEEP SIGNAL (PP3014-14)

TAPE	M. EQ.	SPEC.
ALIGNMENT TAPE (VFJ8125H3F)	OSCILLO-SCOPE/ VIDEO SWEEP GENERATOR	SIGNAL LEVEL AT 7MHz PORTION IS MAXIMUM

Note: 1. Connect the Service Circuit as shown in Fig. E9.
2. Disconnect P501 (from MAIN C.B.A. to HEAD AMP PACK C.B.A.).
3. Set VR3302 to centre position.
4. Connect a jumper wire between PP3011-5 and GND.
5. Set the Video Sweep Signal Generator (video signal only) as shown in Fig. E10.
6. Supply set up video sweep signal to PP3011-14 via Service Circuit.
7. Adjust VR3307 until the signal level at 7MHz portion is miximum as shown in Fig. E11.
8. After this adjustment, connect P501.



(Example)

75 ohm: ERDS2TJ750	0.01 μ: ECCF1H104ZF
1Kohm: ERDS2TJ102	47P: ECCF1H470JC
47Kohm: ERD2TJ473	6V47 μ: ECEA0JK470

Fig. E9

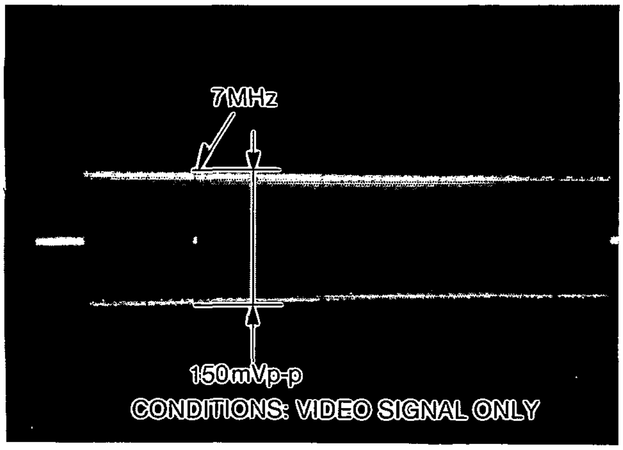


Fig. E10

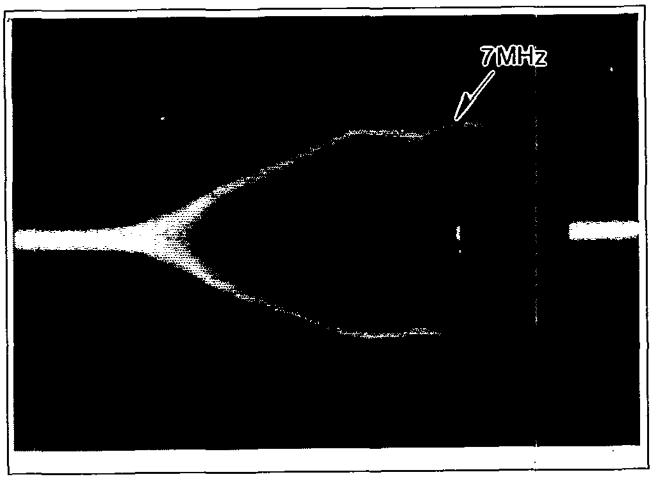


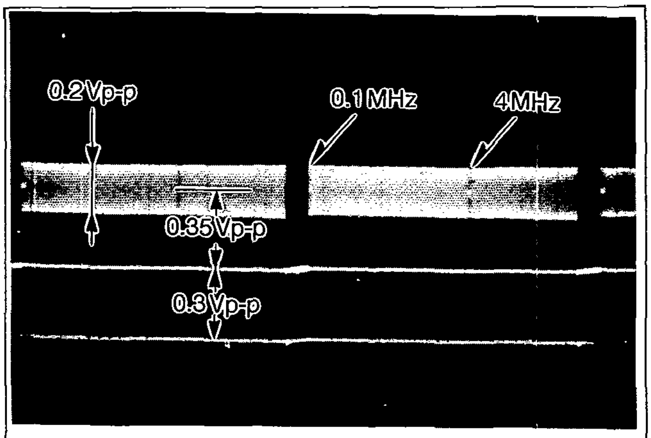
Fig. E11

2-5-12. S-VHS FREQUENCY RESPONSE ADJUSTMENT

TP	ADJ.	MODE	INPUT
TP3021	VR3302 (SP)	SP (SELF RECORDED) PLAYBACK	VIDEO SWEEP SIGNAL (P3002-10)

TAPE	M. EQ.	SPEC.
S-VHS BLANK TAPE	OSCILLO-SCOPE/ VIDEO SWEEP GENERATOR	SP: —4.5+—1(dB) (55—70%)

Note: 1. Before this adjustment, RF PEAK ADJUSTMENT must be done.
2. Set the Video Sweep Signal as shown in Fig. E12.
3. Set the AI SW to OFF position.
4. Connect a jumper wire between PP3003-5 and GND.
5. After this adjustment, disconnect the jumper wire.



CONDITION: BURST SIGNAL OFF
75 ohm TERMINATED

Fig. E12

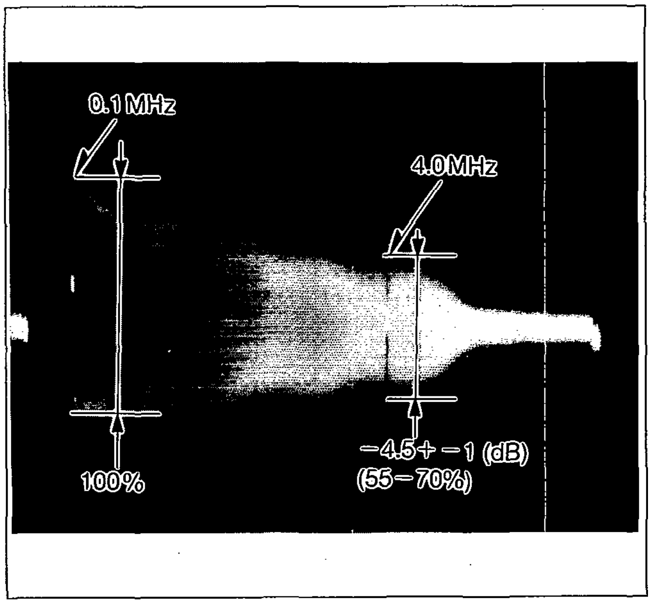


Fig. E13

2-5-13. VHS PLAYBACK LEVEL ADJUSTMENT

TP	ADJ.	MODE	INPUT
TP3021 (Y) TP8021 (C)	VR302 (Y) VR804 (C)	SP (SELF RECORDED) PLAYBACK	PAL COLOUR BAR

TAPE	M. EQ.	SPEC.
BLANK TAPE	OSCILLO-SCOPE	Y: 2.0+—0.1 (Vp-p) C: 1.1+—0.1 (Vp-p)

Note: 1. Set the S-VHS SW to OFF position.

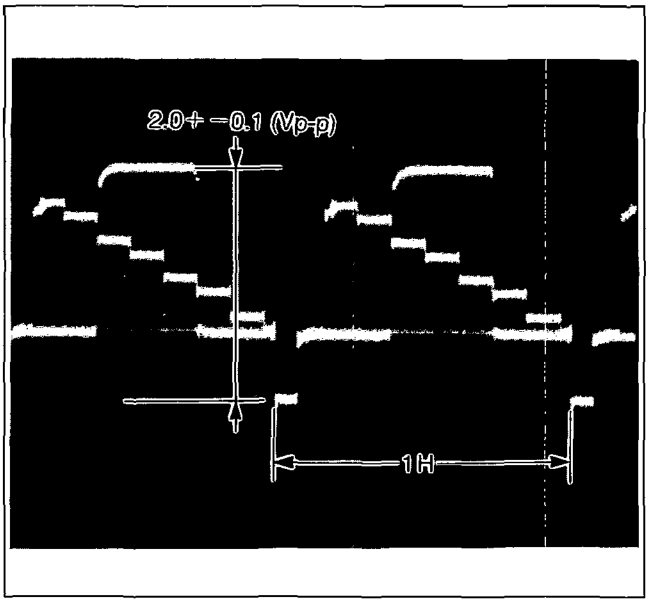


Fig. E14

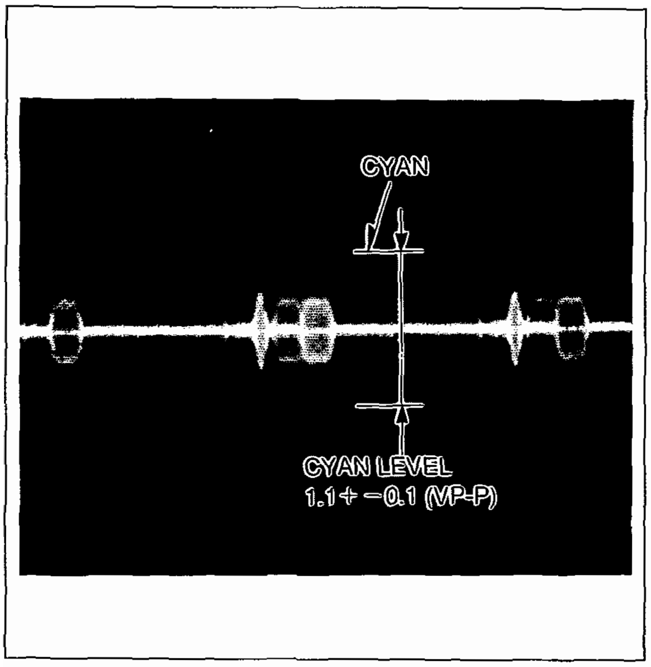


Fig. E15

2-5-14. S-VHS PLAYBACK LEVEL ADJUSTMENT

TP	ADJ.	MODE	INPUT
TP3022 (Y1) TP3021 (Y2)	VR301 (Y1) VR304 (Y2)	SP (SELF RECORDED) PLAYBACK	PAL COLOUR BAR

TAPE	M. EQ.	SPEC.
S-VHS BLANK TAPE	OSCILLO-SCOPE	Y1: 0.43+—0.01(Vp-p) Y2: 2.0+—0.01(Vp-p)

Note: 1. Set the S-VHS SW to ON position.
2. Before this adjustment, VHS PLAYBACK LEVEL ADJUSTMENT must be done.

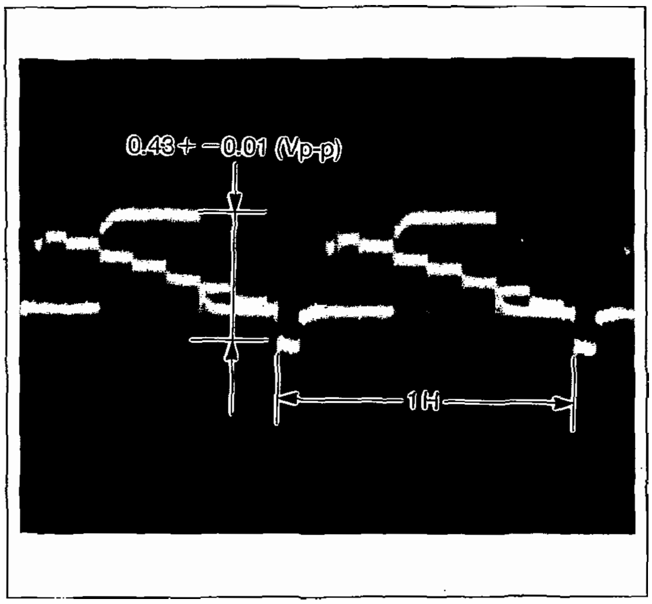


Fig. E16

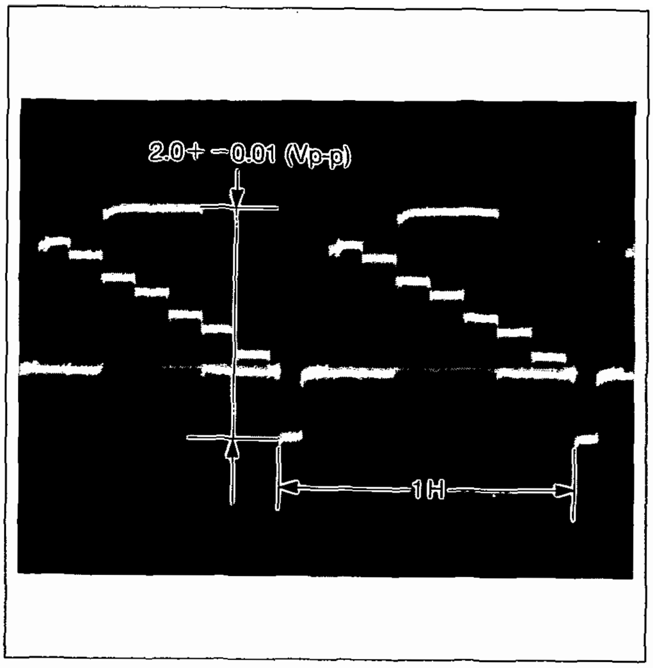


Fig. E17

2-5-15. YNR ADJUSTMENT

TP	ADJ.	MODE	INPUT
IC301-34	VR303	LP RECORDING	PAL COLOUR BAR

TAPE	M. EQ.	SPEC.
BLANK TAPE	OSCILLO-SCOPE	WAVEFORM IS MINIMUM

Note: 1. Connect the capacitor (1500pF) between IC301-34 and GND as shown in Fig. E18.

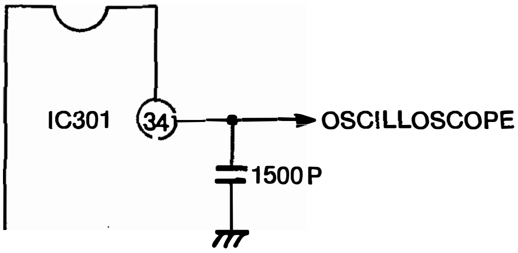


Fig. E18

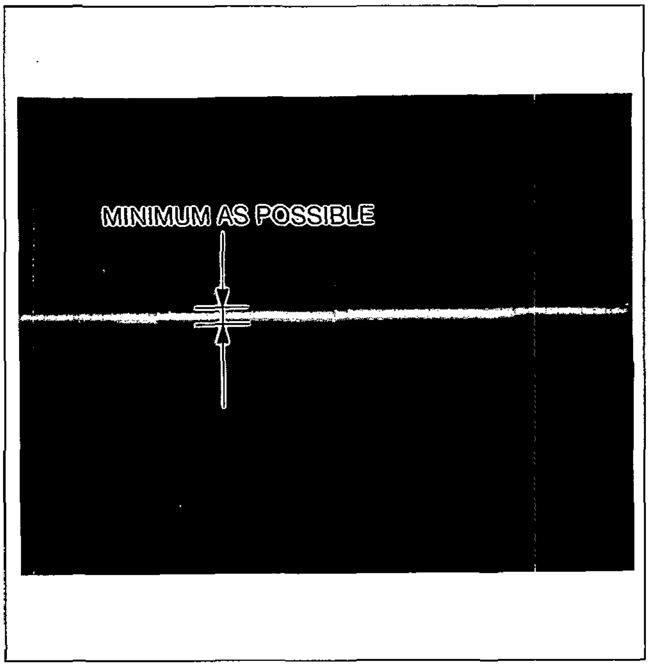


Fig. E19

2-5-16. CHROMINANCE RECURSIVE ADJUSTMENT

TP	ADJ.	MODE	INPUT
IC801-7	VR801 VR802	(SELF RECORDED) PLAYBACK	PAL COLOUR BAR
TAPE	M. EQ.	SPEC.	
BLANK TAPE	OSCILLO-SCOPE	WAVEFORM IS MINIMUM	

Note: 1. Before this adjustment, RECORDING CURRENT and YNR ADJUSTMENT must be done.
Note: 2. Adjust VR801 and VR802 alternately until the amplitude of the signal at IC801-7 is minimum.

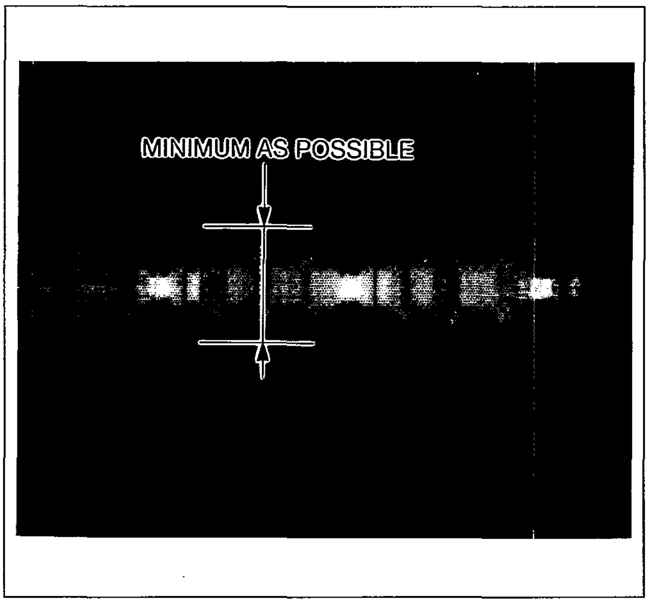


Fig. E20

2-5-17. 1H DELAY GAIN ADJUSTMENT

TP	ADJ.	MODE	INPUT
P9001-1 P9001-3	VR9501	(SELF RECORDED) PLAYBACK	PAL COLOUR BAR
TAPE	M. EQ.	SPEC.	
BLANK TAPE	OSCILLO-SCOPE	SIGNAL LEVEL OF P9001-3 +−0.03 (Vp-p)	

Note: 1. Set the S-VHS and TBC SW to OFF position.
Note: 2. Connect the oscilloscope to P9001-1 and 3.
Note: 3. Adjust VR9501 until the level of P9001-1 is level of P9001-3 +−0.03Vp-p.

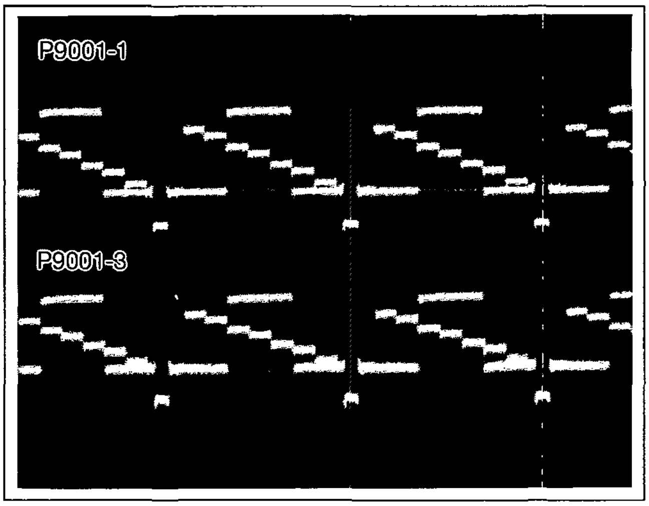


Fig. E21

2-5-18. TBC NOISE GATE ADJUSTMENT

TP	ADJ.	MODE	INPUT
TP9001	VR9002	(SELF RECORDED) PLAYBACK	PAL COLOUR BAR
TAPE	M. EQ.	SPEC.	
BLANK TAPE	OSCILLO-SCOPE	A=1.5+−0.1 (µsec)	

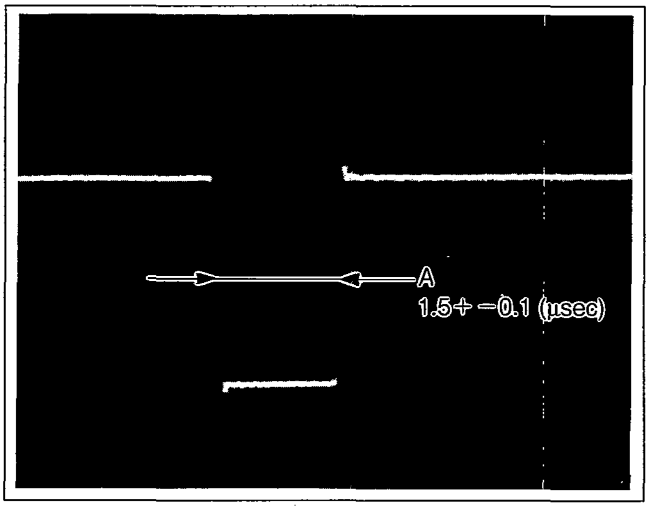


Fig. E22

2-5-19. TBC SYNC LEVEL ADJUSTMENT

TP	ADJ.	MODE	INPUT
P9001-1	VR9007	(SELF RECORDED) PLAYBACK	PAL COLOUR BAR

TAPE	M. EQ.	SPEC.
BLANK TAPE	OSCILLO-SCOPE	B/A=43+—2 (%)

Note: 1. Set the TBC SW to ON position.
Note: 2. Set the S-VHS SW to OFF position.

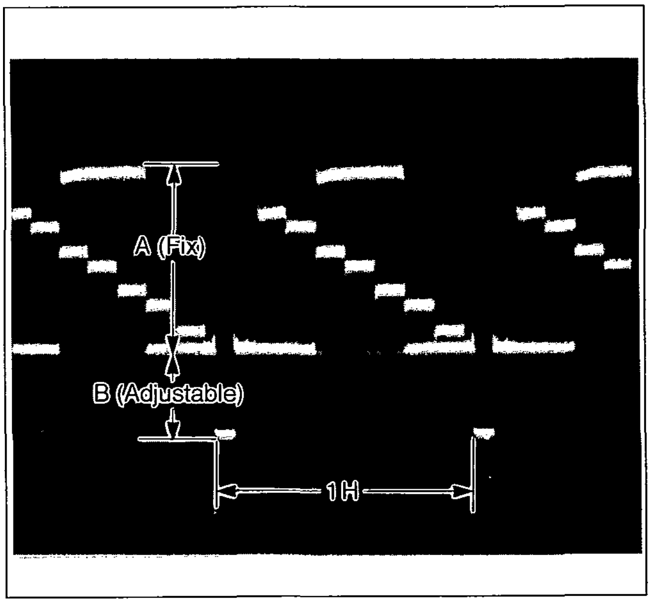


Fig. E23

2-5-20. TBC WHITE BALANCE ADJUSTMENT

TP	ADJ.	MODE	INPUT
P9001-5	VR9005 VR9006	(SELF RECORDED) PLAYBACK	PAL COLOUR BAR

TAPE	M. EQ.	SPEC.
BLANK TAPE	OSCILLO-SCOPE	SIGNAL LEVEL OF WHITE PORTION IS MINIMUM

Note: 1. Set the TBC SW to ON position.
Note: 2. Before TBC R-Y LEVEL and TBC DIGITAL CHROMINANCE LEVEL ADJUSTMENT, this adjustment must be done.
Note: 3. Adjust VR9005 and VR9006 alternately until the signal level of white portion is minimum.

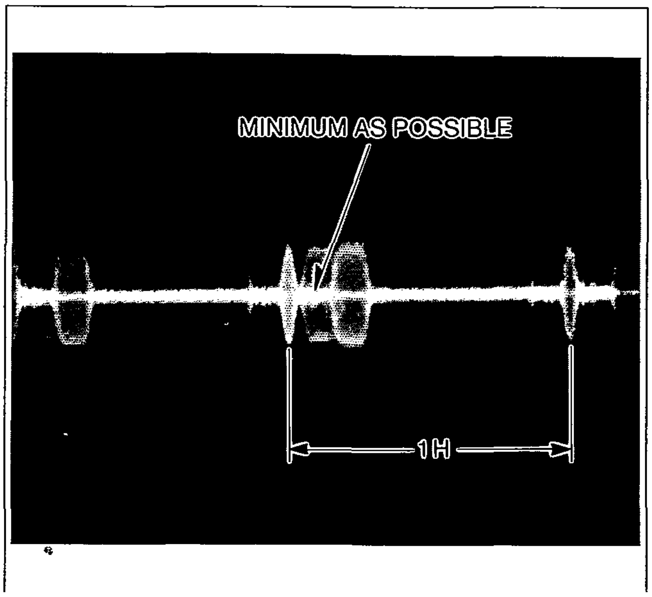


Fig. E24

2-5-21. TBC R-Y LEVEL ADJUSTMENT

TP	ADJ.	MODE	INPUT
VIDEO OUT	VR9003	(SELF RECORDED) PLAYBACK	PAL COLOUR BAR

TAPE	M. EQ.	SPEC.
BLANK TAPE	VECTOR-SCOPE	RED VECTOR PHASE DIFFERENCE IS +—3°

Note: 1. Turn on the TBC SW and adjust VR9003 until the RED vector is +—3° compared with TBC off condition.
Note: 2. Confirm TBC R-Y LEVEL and TBC DIGITAL CHROMINANCE LEVEL ADJUSTMENT mutually when them adjust.

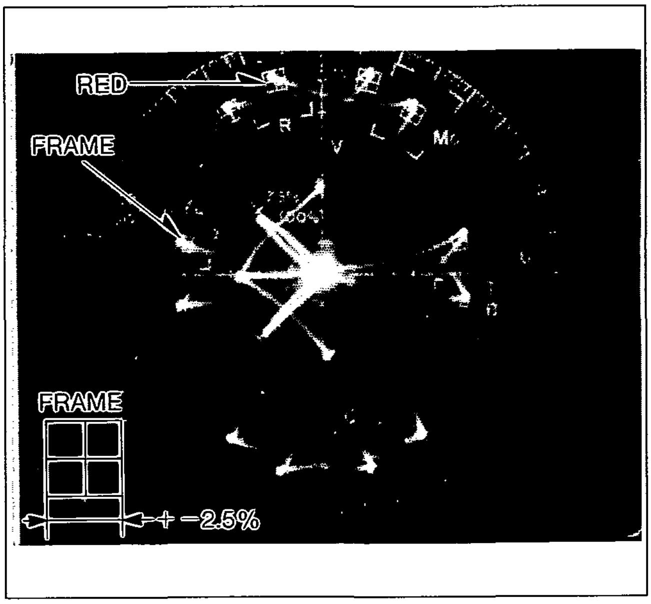


Fig. E25

2-5-22. TBC DIGITAL CHROMINANCE LEVEL ADJUSTMENT

TP	ADJ.	MODE	INPUT
VIDEO OUT	VR9004	(SELF RECORDED) PLAYBACK	PAL COLOUR BAR

TAPE	M. EQ.	SPEC.
BLANK TAPE	VECTOR-SCOPE	BURST LEVEL IS THE SAME

Note: 1. Turn off the TBC SW and adjust GAIN VR on vectorscope until the burst level is 75%.

2. Turn on the TBC SW and adjust VR9004 until the burst level is the same as TBC off condition (75%).

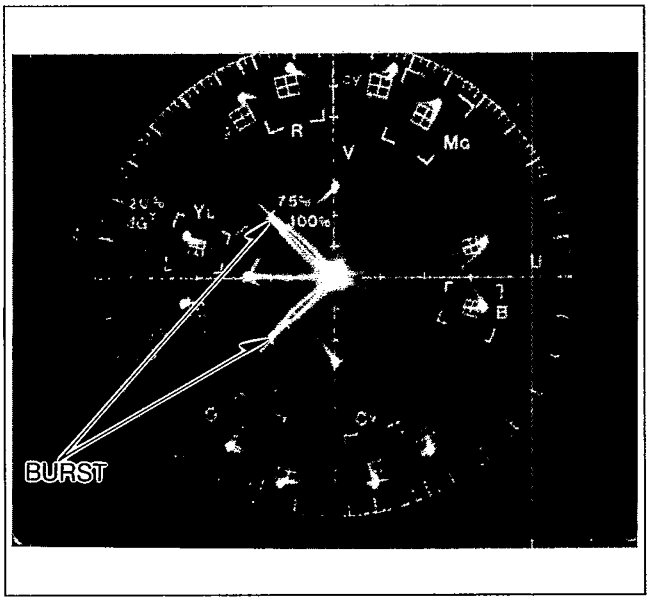


Fig. E26

2-5-23. TBC PLAYBACK LEVEL ADJUSTMENT

TP	ADJ.	MODE	INPUT
P9001-1	VR9001	(SELF RECORDED) PLAYBACK	PAL COLOUR BAR

TAPE	M. EQ.	SPEC.
BLANK TAPE	OSCILLO-SCOPE	100+−2.5 (%)

Note: 1. Set the S-VHS SW to OFF position.

2. Connect the oscilloscope to P9001-1 and 3.

3. Adjust VR9001 until the signal level of P9001-1 is 100+−2.5% compared with signal level of P9001-3.

2-5-24. AGC LEVEL ADJUSTMENT

TP	ADJ.	MODE	INPUT
PP3023-1	VR3901	STOP	PAL COLOUR BAR

TAPE	M. EQ.	SPEC.
BLANK TAPE	OSCILLO-SCOPE	1.0+−0.03 (Vp-p)

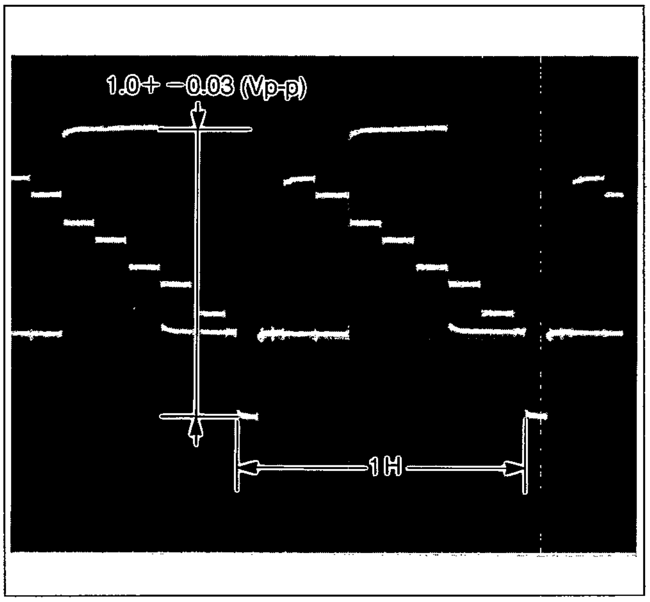


Fig. E27

AUDIO SECTION

2-5-25. BIAS CURRENT ADJUSTMENT

TP	ADJ.	MODE	INPUT
TP4002 (HOT/ TEST LAND) TP4003 (GND/ TEST LAND)	VR4002	RECORDING	

TAPE	M. EQ.	SPEC.
BLANK TAPE	V.T.V.M.	3.0+—0.1 (mVrms)

Note: 1. Connect a jumper wire between TP4004 and GND.
2. Set the S-VHS SW to OFF position.

2-5-26. HiFi E-E LEVEL ADJUSTMENT

TP	ADJ.	MODE	INPUT
AUDIO OUT (L)	VR4512	STOP	SINEWAVE 1KHz/—6dB (AUDIO IN (L))

TAPE	M. EQ.	SPEC.
	V.T.V.M./ SINEWAVE GENERATOR	—8+—0.5 (dB)

Note: 1. Select the STEREO mode by Remote Controller. (Both Left and Right indicators on the FIP are lit.)
2. Set the HIFI REC VR to FIX position.

2-5-27. CARRIER FREQUENCY ADJUSTMENT

TP	ADJ.	MODE	INPUT
IC4501-34 (L) IC4501-47 (R)	VR4501 (NTSC-L) VR4509 (NTSC-R) VR4551 (PAL-L) VR4552 (PAL-R)	SP RECORDING	

TAPE	M. EQ.	SPEC.
BLANK TAPE	FREQUENCY COUNTER	NTSC-L: 1.3+—0.003 (MHz) NTSC-R: 1.7+—0.003 (MHz) PAL-L: 1.4+—0.003 (MHz) PAL-R: 1.8+—0.003 (MHz)

Note: 1. When adjusting the NTSC mode, connect a jumper wire between PP3013-13 and GND.
2. When adjusting the PAL mode, disconnect a jumper wire.

2-5-28. DEVIATION ADJUSTMENT

TP	ADJ.	MODE	INPUT
BETWEEN VR4502 and R4511 (L) BETWEEN VR4507 and R4561 (R)	VR4502 (L) VR4507 (R)	SP RECORDING	SINEWAVE 1KHz/—6dB (AV1 IN)

TAPE	M. EQ.	SPEC.
BLANK TAPE	V.T.V.M./ SINEWAVE GENERATOR	110 (mVrms)

Note: 1. Before recording the sinewave, adjust the HIFI REC VR until the audio output level of AV1 is 400mVrms.

2-5-29. FM B.P.F. ADJUSTMENT

TP	ADJ.	MODE	INPUT
IC4501-33 (L) IC4501-48 (R)	VR4550	PLAYBACK	SINEWAVE 1.608MHz/ 400mVp-p (PS4003-8)

TAPE	M. EQ.	SPEC.
NTSC RECORDED TAPE	OSCILLO-SCOPE/ SINEWAVE GENERATOR	Lch (IC4501-33)= Rch (IC4501-48)

Note: 1. Disconnect P501 (from MAIN C.B.A. to HEAD AMP PACK C.B.A.).
2. Connect a jumper wire between PP4003-16 and GND.
3. The GND lead of oscilloscope must be connected to GND on HIFI AUDIO PACK C.B.A. to reduce the noise.
4. Supply the sinewave signal (1.608MHz/400mVp-p) to PS4003-8.
5. After this adjustment, connect P501 and disconnect the jumper wire.

TIMER SECTION

2-5-30. TIMER REFERENCE CLOCK ADJUSTMENT

TP	ADJ.	MODE	INPUT
TL7501	C7501	STOP	

TAPE	M. EQ.	SPEC.
	UNIVERSAL COUNTER	7812.5+—0.015 (μsec)

2-5-31. LEVEL METER SENSITIVITY ADJUSTMENT

TP	ADJ.	MODE	INPUT
LEVEL METER ON THE FIP	VR4004	STOP	SINEWAVE 1 KHz/—6 dB (AUDIO IN (L), (R))

TAPE	M. EQ.	SPEC.
		0dB INDICATOR ON THE AUDIO LEVEL METER JUST LIGHTS UP

Note: 1. Select the STEREO mode.
(Both Left and Right indicators on the FIP are lit.)
2. Before recording the sinewave, adjust the HIFI REC VR until the signal level at Audio Output Terminal is 400 mVrms.

2-5-32. CHARACTER GENERATOR VCO ADJUSTMENT

TP	ADJ.	MODE	INPUT
IC3501-26 (TL3)	C3502	STOP	PAL COLOUR BAR

TAPE	M. EQ.	SPEC.
	V.T.V.M.	2.5+—0.25 V

Memo

SECTION 3
BLOCK DIAGRAMS

3-1. ABBREVIATIONS

443NT [L]	4.43 NTSC Ⓛ
A. COMP	AUDIO COMPONENT SIGNAL
A. COMPO	AUDIO COMPONENT SIGNAL
A. D.P [L]	AUDIO DUBBING PAUSE Ⓛ
A. D/L [L]	AUDIO DUBBING PAUSE Ⓛ
A. DEF [S]	AUDIO DEFEAT
A. DEF [S] [L]	AUDIO DEFEAT
A. DUB P [L]	AUDIO DUBBING PAUSE Ⓛ
A. DUB [H]	AUDIO DUBBING Ⓗ
A. ERASE	AUDIO ERASE
A. H. SW	AUDIO HEAD SWITCHING PULSE
A. HEAD [R]	AUDIO HEAD (REC)
A. HEAD [W]	AUDIO HEAD (PLAY)
A. IN [L]	AUDIO INPUT (L)
A. IN [R]	AUDIO INPUT (R)
A. MUT [H]	AUDIO MUTE Ⓗ
A. MUTE [H]	AUDIO MUTE Ⓗ
A. OUT [L]	AUDIO OUTPUT (L)
A. OUT [R]	AUDIO OUTPUT (R)
A. RF OUT	AUDIO RF SIGNAL OUTPUT
A/VS/S. DATA	AV SW/SERIAL DATA
AC ONLINE	AC ONLINE
AC. O/EE. H	AC ONLINE/EE Ⓗ
AFC S C	AFC S CURVE
AFC [S]	AFC S CURVE
AFC. DEF	AFC DEFEAT
ARFC OUT	AUDIO RF SIGNAL OUTPUT
ART. V	ARTIFICIAL VERTICAL SYNC SIGNAL
ART. V. MM	ARTIFICIAL VERTICAL SYNC SIGNAL MONO MULTI
ART. V/H/N	ARTIFICIAL VERTICAL SYNC SIGNAL Ⓗ/NORMAL
AT. V/H/N	ARTIFICIAL VERTICAL SYNC SIGNAL
ATSW/TEST/NOR/SE	TEST/NORMAL/SERVICE
AUDIO IN [L]	AUDIO INPUT (L)
AUDIO IN [R]	AUDIO INPUT (R)
AUDIO OUT [L]	AUDIO OUTPUT (L)
AUDIO OUT [R]	AUDIO OUTPUT (R)
AUDIO SELECT [H]	AUDIO SELECT Ⓗ
AUDIO. L	AUDIO (L)
AUDIO. R	AUDIO (R)
AV CNT	AV CONTROL
AV CTL	AV CONTROL
AV CTL/S. CLK	AV CONTROL/SERIAL CLOCK
AV. C.M.	AV CONTROL MODE
AVCNT/METER. R	AV CONTROL/LEVEL METER (R)
AVSW/METER. L	AV SW/LEVEL METER (L)
B MODE. H	B MODE Ⓗ
B.G.P	BURST GATE PULSE
BACKUP 5V	BACK UP 5V
BAND. U.E.	BAND U
BANDVL. D	BAND VL
BI/MI [L]	BILINGUAL/MIX Ⓛ
BIL	BILINGUAL
BIL [L]	BILINGUAL Ⓛ
BIL. [H]	BILINGUAL Ⓗ
BIL/M1 [L]	BILINGUAL Ⓛ
BS CLOCK	BS CLOCK
BS DATA	BS DATA
BS LCH IN	BS L CHANNEL INPUT
BS MIX [H]	BS MIX Ⓗ
BS MON [H]	BS MONITOR Ⓗ
BS MONI [H]	BS MONITOR Ⓗ
BS RCH IN	BS R CHANNEL INPUT
BS VIDEO	BS VIDEO SIGNAL
BS VIDEO/BS1	BS VIDEO SIGNAL
BS [H]	BS Ⓗ
BS. LEVEL	BS LEVEL
BS. M [H]	BS MONITOR Ⓗ
BS/VTR [H]	BS/VTR Ⓗ
BUS CLK	BUS CLOCK
BUS LSN	BUS LISTEN
BUS TLK	BUS TALK
BUZZER	BUZZER
CAP EC	CAPSTAN TORQUE CONTROL
CAP M GND	CAPSTAN MOTOR GND
CAP. ET	CAPSTAN TORQUE CONTROL
CAP. FG1	CAPSTAN FG1 PULSE
CAP. FG2	CAPSTAN FG2 PULSE
CAS. SW	CASSETTE SW
CCN	PLAYBACK CONTROL SIGNAL (−)
CCP	PLAYBACK CONTROL SIGNAL (+)
CHM	CONTROL SIGNAL (+)
CHP	CONTROL SIGNAL (−)
CINEM [L]	CINEMA Ⓛ
CINEMA [L]	CINEMA Ⓛ
CINEMA/MIX	CINEMA/MIX
CKL	RATCH LOCK
CKS	SHIFT LOCK
CL	CLOCK
CLK	CLOCK
CLK (C.G)	CLOCK
CLOCK. IN	CLOCK INPUT
CLP	CLAMP
COL/B/W/NOR	COLOUR/BLACK & WHITE/NORMAL
COLOR [H]	COLOUR Ⓗ
CONV	CONVERTOR
CS	CHIP SELECT
CTL GND	CONTROL GND
CTL HEAD [+]	CONTROL HEAD (+)
CTL HEAD [−]	CONTROL HEAD (−)
CTL [+]	CONTROL HEAD (+)
CTL [−]	CONTROL HEAD (−)
CUE BIAS	CUE BIAS
CURRENT LIM	CURRENT LIMMITER
CYL ET	CYLINDER TORQUE CONTROL
CYL GND	CYLINDER GND
D.F.M. REC [H]	DELAIED FM RECORDING Ⓗ
D. FM REC [L]	DELAIED FM RECORDING Ⓛ
D. GND	DIGITAL GND

D. REC [H]	DELAYED RECORDING Ⓗ
D4/S. LED	D4/STILL LED
D4/STILLED	D4/STILL LED
DAC [CLK]	TUNER DAC (CLOCK)
DAC/FSCS	TUNER DAC/FS CHIP SELECT
DAREC [H]	DELAYED AUDIO RECORDING Ⓗ
DATA	DATA
DECODER [L]	DECODER (L)
DECODER [R]	DECODER (R)
DEW	DEW
DEW SNS	DEW SENSOR
DFMRE [H]	DELAYED FM AUDIO RECORDING Ⓗ
E. REC 5V	EXCEPT RECORDING 5V
EC	ERROR TORQUE CONTROL
ECR	ERROR TORQUE CONTROL REFERENCE VOLTAGE
EDT TRIG [L]	EDIT TRIGGER Ⓛ
EDIT [H]	EDIT Ⓗ
EE [H]	EE Ⓗ
EE [H]/INS [M]	EE Ⓗ/INSERT Ⓜ
EE. VV. TR	EE/VV/TRICK PLAY
EJECT. PO	EJECT POSITION
EJECT/VDET	EJECT/REVERSE SLOW LOCK
ENV. SEL	ENVELOPE SELECT
ENVE. OUT	ENVELOPE OUTPUT
ENVE. SEL	ENVELOPE SELECT
ENV SELECT	ENVELOPE SELECT
EP [H]	LP Ⓗ
EP/LP [H]	LP Ⓗ
EP/LP/SP	LP/SP
EP/SS [H]	LP/SLOW/STILL/STOP Ⓗ
EPROMCS	EPROM CHIP SELECT
EX. REC 5V	EXCEPT RECORDING 5V
FF/REW [L]	FIRST FORWARD/REWIND Ⓛ
FG1 IN	FG1 PULSE INPUT
FG2 IN	FG2 PULSE INPUT
FILTER ADJUSTMEN	FILTER ADJUSTMENT
FLY ERASE [H]	FLYING ERASE HEAD ON Ⓗ
FLY ON [H]	FLYING ERASE E HEAD ON Ⓗ
FLY. E [H]	FLYING ERASE HEAD ON Ⓗ
FM MUT [H]	FM AUDIO MUTE Ⓗ
FM MUTE [H]	FM AUDIO MUTE Ⓗ
FM OUT [L]	FM OUTPUT (L)
FM OUT [R]	FM OUTPUT (R)
FM PACK OUT [L]	FM PACK OUTPUT (L)
FM PACK OUT [R]	FM PACK OUTPUT (R)
FM/BS SEL [L]	FM/BS SELECT (L)
FM/BS SEL [R]	FM/BS SELECT (R)
FS. CLK	FS CLOCK
FUL. E [H]	FULL ERASE HEAD ON Ⓗ
FULL. E [H]	FULL ERASE HEAD ON Ⓗ
FULL. E. 12V	FULL ERASE 12V
GND [A]	GND (ANALOGUE)
GND [TU]	GND (TUNER)
GND/N. SW. 12V	GND/NON SW 12V
H. SYNC	HORIZONTAL SYNC
H. AMP. SW	HEAD AMP SW PULSE
H. P <R>	HEAD PHONE (R)
H. P <L>	HEAD PHONE (L)
H. P GND	HEAD PHONE GND
H. P OUT [L]	HEAD PHONE OUTPUT (L)
H. P OUT [R]	HEAD PHONE OUTPUT (R)
H. SW	HEAD SW PULSE
HEAD PHONE [L]	HEAD PHONE (L)
HEAD PHONE [R]	HEAD PHONE (R)
HEAD SW	HEAD SW
HEATER [+]	HEATER (+)
HEATER [ ]	HEATER ( )
HSS	HORIZONTAL SYNC SIGNAL
HTR [+]	HEATER (+)
HTR [ ]	HEATER ( )
I RFE	REFERENCE CURRENT
ICL	CONTROL AGC CIRCUIT
IF	INTERMEDIATE FREQUENCY
IN SELA1	INPUT SELECT A1 POSITION
IN SELA2	INPUT SELECT A2 POSITION
IN SELA3	INPUT SELECT A3 POSITION
INS L/R [L]	INSERT Lch/Rch Ⓛ
INS. [H]	INSERT Ⓗ
INSEL A1	INPUT SELECT A1 POSITION
INSEL A2	INPUT SELECT A2 POSITION
INSERT	INSERT
INSERT [H]	INSERT Ⓗ
IO CS	INPUT/OUTPUT CHIP SELECT
JOG1	JOG1
JOG S3 LED/FOWRD	JOG LED/FORWARD LED
JOG/F. LED	JOG LED/FORWARD LED
JSB [H]	JSB Ⓗ
JST. CLCK	JUST CLOCK
JST. CLK	JUST CLOCK
JST. CLOCK	JUST CLOCK
L. OUT	Lch OUTPUT
L. CH [H]	Lch Ⓗ
L. CH [L]	Lch Ⓛ
LED (MAIN)	LED (MAIN)
LED (STEREO)	LED (STEREO)
LED (SUB)	LED (SUB)
LED CKL	LED SERIAL CLOCK
LED CKS	LED SERIAL CLOCK
LED DATA	LED SERIAL DATA
LINE IN 1 [L]	LINE INPUT 1 (L)
LINE IN 1 [R]	LINE INPUT 1 (R)
LINE IN 2 [L]	LINE INPUT 2 (L)
LINE IN 2 [R]	LINE INPUT 2 (R)
LINE IN V	LINE INPUT VIDEO
LINE IN [L]	LINE INPUT (L)
LINE IN [R]	LINE INPUT (R)
LINE OUT [L]	LINE OUTPUT (L)
LINE OUT [R]	LINE OUTPUT (R)
LP [H]	LP Ⓗ

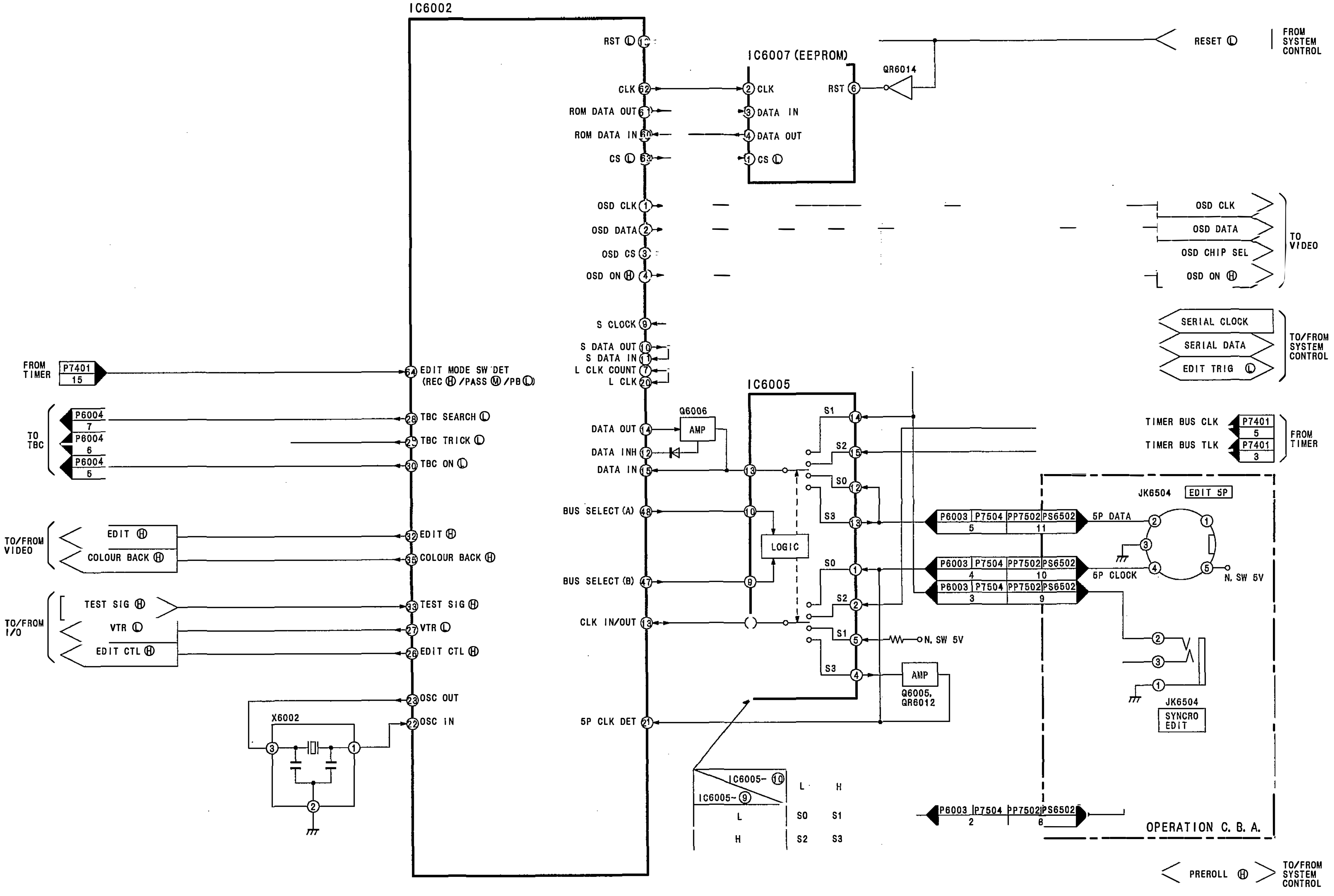
LPTRI [L]	LP TRICK PLAY Ⓛ
Lch/A. DUB	Lch/AUDIO DUBBING
M GND	MOTOR GND
M REG	MOTOR REGULATOR
MAIN OUT	MAIN OUTPUT
MAIN [L]	MAIN Ⓛ
MAIN/MONO	MAIN/MONAURAL
MAX IN	MAXIMAM INPUT
MES [H]	MESECAM Ⓗ
MESE [H]	MESECAM Ⓗ
MESE [L]	MESECAM Ⓛ
METER 5V	LEVEL METER 5V
METER [L]	LEVEL METER (L)
METER [R]	LEVEL METER (R)
METER. L/AVS	LEVEL METER (L)
METER. R/AVC	LEVEL METER (R)
MI/BI [L]	MIX Ⓗ/BILIGUAL
MIC GND	MIC GND
MIC IN	MIC INPUT
MIC IN [L]	MIC INPUT (L)
MIC IN [R]	MIC INPUT (R)
MIC [H]	MIC Ⓗ
MIX [H]	MIX Ⓗ
MIX [H]/CINEMA [L]	MIX Ⓗ/CINEMA SOUND Ⓛ
MIX/CINE	MIX Ⓗ/CINEMA SOUND Ⓛ
MIX/CINEMA [L]	MIX Ⓗ/CINEMA SOUND Ⓛ
MN. H/M. L	MONAURAL Ⓗ/MAIN Ⓛ
MN. H/MAI. L	MONAURAL Ⓗ/MAIN Ⓛ
MN2/MES. L	MONAURAL 2/MESECAM Ⓛ
MODE SEL	AUDIO MODE SELECT
MODE SW	AUDIO MODE SW
MODE. S. IN	AUDIO MODE SELECT INPUT
MODE. S. OUT	AUDIO MODE SELECT OUTPUT
MONO [H]	MONAURAL Ⓗ
MONO [H]/MAIN [L]	MONAURAL Ⓗ/MAIN Ⓛ
MONO2 [L]	MONAURAL 2
MONO2/MESE [FM(L)]	MONAURAL 2/MESECAM (FM Ⓛ)
MOTOR GND	MOTOR GND
MUTE	MUTE
N. A. REC [L]	NORMAL AUDIO RECORDING
N. SW 12V	NON SW 12V
N. SW. 5. DET	NON SW 5V DETECT
NICAM	NICAM
NICAM [L]	NICAM Ⓛ
NOL [H]	PAL Ⓗ/4.43 NTSC Ⓜ/3.58 NTSC Ⓛ
NOR/SOFT [H]	NORMAL/SOFT TAPE PLAY Ⓗ
NORMAL [H]	NORMAL Ⓗ
NR BIAS	NR BIAS
NTSC [L]	NTSC Ⓛ
OCH	CONTROL AGC CIRCUIT
OUT	OUTPUT
P-OFF [H]	POWER OFF Ⓗ
P-OFF [L]	POWER OFF Ⓛ
P. FAIL	POWER FAILURE DETECT
P. OFF [H]	POWER OFF Ⓗ

P. OFF [L]	POWER OFF Ⓛ
PAL [H]	PAL Ⓗ
PAL [L]/NTSC [H]	PAL Ⓛ/NTSC Ⓗ
PB ADJ OUT	PLAYBACK ADJUST OUTPUT
PB OUT	PLAYBACK OUTPUT
PB. H	PLAYBACK Ⓗ
PFG	PG/FG
PHOTSN +B	PHOTO SENSOR +B
PICT. CNT	PICTURE CONTROL
PLAY LED/RVS LED	PLAY LED/REVERSE LED
PLAY. PO	PLAY POSITION
PLAY/R. LED	PLAY LED/REVERSE LED
PLY/DEW	PLAY/DEW Ⓗ
POWER OFF [L]	POWER OFF Ⓛ
PREROLL [H]	PREROLL Ⓗ
PWRFAIL	POWER FAILURE DETECT
R. CH [H]	Rch Ⓗ
R. CH [L]	Rch Ⓛ
R. ST	RESET
R/S/F	REVERSE Ⓗ/STOP Ⓜ/FORWARD Ⓛ
RCH [H]	Rch Ⓗ
REC 12V	RECORDING 12V
REC CHROMA	RECORDING CHROMINANCE SIGNAL
REC H	RECORDING Ⓗ
REC IN	RECORDING INPUT
REC OUT [L]	RECORDING OUTPUT Ⓛ
REC START	RECORDING START
REC VR [C]	RECORDING VOLUME (COMMON)
REC VR [L]	RECORDING VOLUME (L)
REC VR [R]	RECORDING VOLUME (R)
REC Y	RECORDING LUMINANCE SIGNAL
REC [H]	RECORDING Ⓗ
REC. C	RECORDING CHROMINANCE SIGNAL
REC. Y	RECORDING LUMINANCE SIGNAL
REC/EE CTL	RECORDING/EE CONTROL
REEL-T	REEL PULSE (TAKE-UP)
REEL-S	REEL PULSE (SUPPLY)
REGULATOR FILTER	REGULATOR FILTER
RESET	RESET
REV M F/R	REVIEW MOTOR FORWARD/REVERSE
REV M V1	REVIEW MOTOR V1
REV M V2	REVIEW MOTOR V2
REV MOTOR F/R	REVIEW MOTOR FORWARD/REVERSE
REV MOTOR V1	REVIEW MOROR V1
REV MOTOR V2	REVIEW MOTOR V2
REV MOTOR [+]	REVIEW MOTOR (+)
REV MOTOR [−]	REVIEW MOTOR (−)
REV. M. GND	REVIEW MOTOR GND
RF. CHROMA	RF CHROMINANCE SIGNAL
RF OUT	RF OUTPUT
RF Y	RF LUMINANCE SIGNAL
RF. Y. IN	RF LUMINANCE SIGNAL INPUT
RF. Y. OUT	RF LUMINANCE SIGNAL OUTPUT

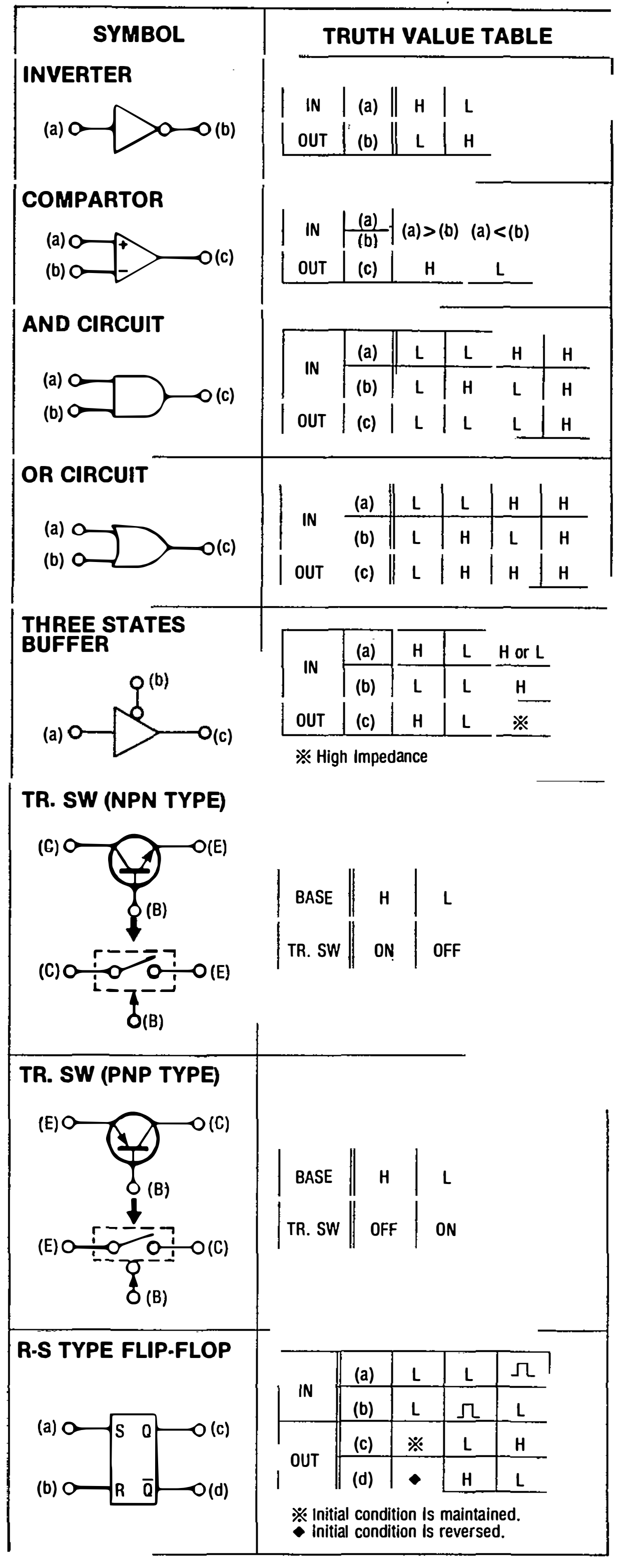
ROTAR. SW	ROTARY SW
ROTARY	ROTARY SW
RST	RESET
RST [L]	RESET Ⓛ
Rch/INST	Rch/INSERT
S IN	SERIAL DATA INPUT
S OUT	SERIAL DATA OUTPUT
S-PHOTO	SUPPLY PHOTO TRANSISTOR
S-RL. PLS	SUPPLY REEL PULSE
S. CLK	SERIAL CLOCK
S. CLK/AV	SERIAL CLOCK/AV
S. DATA	SERIAL DATA
S. DATA/A	SERIAL DATA
S. PHOTO	SUPPLY PHOTO TRANSISTOR
S. TAB [L]	SAFETY TAB SW ON Ⓛ
S/P/N	SECAM/PAL/NTSC
SC IN	SERIAL CLOCK INPUT
SC OUT	SERIAL CLOCK OUTPUT
SCK SELECT	SERIAL CLOCK SELECT
SEL OUT [L]	SELECT OUTPUT (L)
SEL OUT [R]	SELECT OUTPUT (R)
SHUTTLE 1	SHUTTLE 1
SIF	SOUND INTERMEDIATE FREQUENCY
SLMUT [H]	INPUT SELECT MUTE Ⓗ
SLNID [+]	SOLENOID (+)
SLNID [−]	SOLENOID (−)
SLW TR. MM	SLOW TRACKING MONO MULTI
SLW TR. REF	SLOW TRACKING REFERENCE VOLTAGE
SNS. GND	SENSOR GND
SOFT [H]	SOFT TAPE PLAY Ⓗ
SOFT [H]/NORMAL	SOFT TAPE PLAY Ⓗ/NORMAL Ⓗ
SOLENOID ON [L]	SOLENOID ON Ⓛ
SP [H]	SP Ⓗ
SP/L/SLP	SP/LP
SSS [L]	SLOW/STILL/STOP
STEREO LED	STEREO LED
STEREO [H]	STEREO Ⓗ
STEREO [L]	STEREO Ⓛ
STOP. PO	STOP POSITION
STOP/5V	STOP POSITION/5V
STOP1/TAPE SEL	STOP1 POSITION/TAPE SELECT
STOP1/PAL: ST	STOP1 POSITION/PAL
STOP2. PO	STOP 2 POSITION
STOP2/S-TAB	STOP 2 POSITION/SAFETY TAB SW
STREO [H]	STEREO Ⓗ
SUB BIAS	SUB BIAS
SUB. SW	SUB SW
SVHS CAS [L]	S-VHS CASSETTE Ⓛ
SW. 5. DET	SW 5V DETECT
SYNC [L]	SYNC Ⓛ
SYSCON 5V	SYSTEM CONTROL 5V
SYSTEM	SYSTEM SW
T-PHOTO	TAKE-UP PHOTO TRANSISTOR
T-RL. PLS	TAKE-UP REEL PULSE

T. BUSCLK	TIMER BUS CLOCK
T. BUSLSN	TIMER BUS LISTEN
T. BUSTLK	TIMER BUS TALK
T. END [L]	TAPE END Ⓛ
T. PHOTO	TAKE-UP PHOTO TRANSISTOR
TAPE END [L]	TAPE END Ⓛ
TAPE END [L]/CAM	TAPE END Ⓛ/CAMERA PAUSE
TEST	TEST MODE
TPZ	TRAPEZOIDAL WAVE CIRCUIT
TRIC [L]	TRIC PLAY Ⓛ
TRICK [L]	TRIC PLAY Ⓛ
TRK. ENV	AUTO TRACKING ENVELOPE DETECT
TU. AUDIO	TUNER AUDIO
TU. GND	TUNER GND
TU. V. IN	TUNER VIDEO SIGNAL INPUT
TU. VIDEO	TUNER VIDEO
TUN NOR IN	TUNER NORMAL INPUT
TUN R	TUNER AUDIO (R)
TUN. AUDIO IN	TUNER AUDIO INPUT
TUNER 12V	TUNER 12V
TUNER L	TUNER AUDIO (L)
TUNER V IN	TUNER VIDEO SIGNAL INPUT
TUNER [L]	TUNER AUDIO (L)
TUNER [N]	TUNER AUDIO (NORMAL)
TUNER [R]	TUNER AUDIO (R)
TUNER. 12	TUNER 12V
TUOFF [H]	TUNER OFF Ⓗ
TV. AUDIO	TV AUDIO
TV/VTR	TV/VTR
TXTON [L]	TEXT ON Ⓛ
U. REG45V	UNREGULATOR 45V
UNREG	UNREGULATOR
UNREG19V	UNREGULATOR 19V
V. REF	REFERENCE VOLTAGE
V. EE [H]	VIDEO EE Ⓗ
V. EE [L]	VIDEO EE Ⓛ
VCO REF	RERERENCE OSCILLATER
VD. IN	VIDEO SIGNAL INPUT
VD. OUT	VIDEO SIGNAL OUTPUT
VIDEO EE [L]	VIDEO EE Ⓛ
VIDEO IN	VIDEO SIGNAL INPUT
VIDEO OUT	VIDEO SIGNAL OUTPUT
VM	MOTOR VOLTAGE
VM DOWN [L]	MOTOR VOLTAGE DOWN Ⓛ
VSS	VERTICAL SYNC SIGNAL
VTR [H]	VTR Ⓗ
VTR. 12V	VTR 12V
X IN	OSCILLATOR INPUT
X OUT	OSCILLATOR OUTPUT

3-2. EDIT BLOCK DIAGRAM


IC6002
RST Ⓛ
CLK 62
ROM DATA OUT 61
ROM DATA IN 60
CS Ⓛ 63
IC6007 (EEPROM)
② CLK
③ DATA IN
④ DATA OUT
① CS Ⓛ
RST ⑥
QR6014
RESET Ⓛ
FROM SYSTEM CONTROL
OSD CLK ①
OSD DATA ②
OSD CS ③
OSD ON Ⓗ ④
OSD CLK
OSD DATA
OSD CHIP SEL
OSD ON Ⓗ
TO VIDEO
S CLOCK ⑨
S DATA OUT ⑩
S DATA IN ⑪
L CLK COUNT ⑦
L CLK ⑳
SERIAL CLOCK
SERIAL DATA
EDIT TRIG Ⓛ
TO/FROM SYSTEM CONTROL
FROM TIMER
P7401 15
64 EDIT MODE SW DET (REC Ⓗ /PASS Ⓜ /PB Ⓛ)
TO TBC
P6004 7
P6004 6
P6004 5
28 TBC SEARCH Ⓛ
29 TBC TRICK Ⓛ
30 TBC ON Ⓛ
TO/FROM VIDEO
EDIT Ⓗ
COLOUR BACK Ⓗ
32 EDIT Ⓗ
35 COLOUR BACK Ⓗ
TO/FROM I/O
TEST SIG Ⓗ
VTR Ⓛ
EDIT CTL Ⓗ
33 TEST SIG Ⓗ
27 VTR Ⓛ
26 EDIT CTL Ⓗ
23 OSC OUT
22 OSC IN
X6002
Q6006
AMP
DATA OUT ⑭
DATA INH ⑫
DATA IN ⑮
BUS SELECT (A) 48
BUS SELECT (B) 47
CLK IN/OUT ⑬
5P CLK DET 21
IC6005
S1
S2
S0
S3
LOGIC
N. SW 5V
AMP
Q6005, QR6012
TIMER BUS CLK
TIMER BUS TLK
P7401 5
P7401 3
FROM TIMER
JK6504
EDIT 5P
P6003 P7504 PP7502 PS6502
5 11
4 10
3 9
2 8
5P DATA
5P CLOCK
N. SW 5V
JK6504
SYNCRO EDIT
OPERATION C. B. A.
PREROLL Ⓗ
TO/FROM SYSTEM CONTROL

IC6005-⑩ / IC6005-⑨	L	H
L	S0	S1
H	S2	S3


SYMBOL
TRUTH VALUE TABLE
INVERTER
(a)
(b)
COMPARTOR
(a)
(b)
(c)
AND CIRCUIT
(a)
(b)
(c)
OR CIRCUIT
(a)
(b)
(c)
THREE STATES BUFFER
(a)
(b)
(c)
TR. SW (NPN TYPE)
(C)
(E)
(B)
TR. SW (PNP TYPE)
(E)
(C)
(B)
R-S TYPE FLIP-FLOP
S Q
R Q̄
(a)
(b)
(c)
(d)

INVERTER

IN	(a)	H	L
OUT	(b)	L	H

COMPARTOR

IN	(a)/(b)	(a)>(b)	(a)<(b)
OUT	(c)	H	L

AND CIRCUIT

IN	(a)	L	L	H	H
	(b)	L	H	L	H
OUT	(c)	L	L	L	H

OR CIRCUIT

IN	(a)	L	L	H	H
	(b)	L	H	L	H
OUT	(c)	L	H	H	H

THREE STATES BUFFER

IN	(a)	H	L	H or L
	(b)	L	L	H
OUT	(c)	H	L	※

※ High impedance

TR. SW (NPN TYPE)

BASE	H	L
TR. SW	ON	OFF

TR. SW (PNP TYPE)

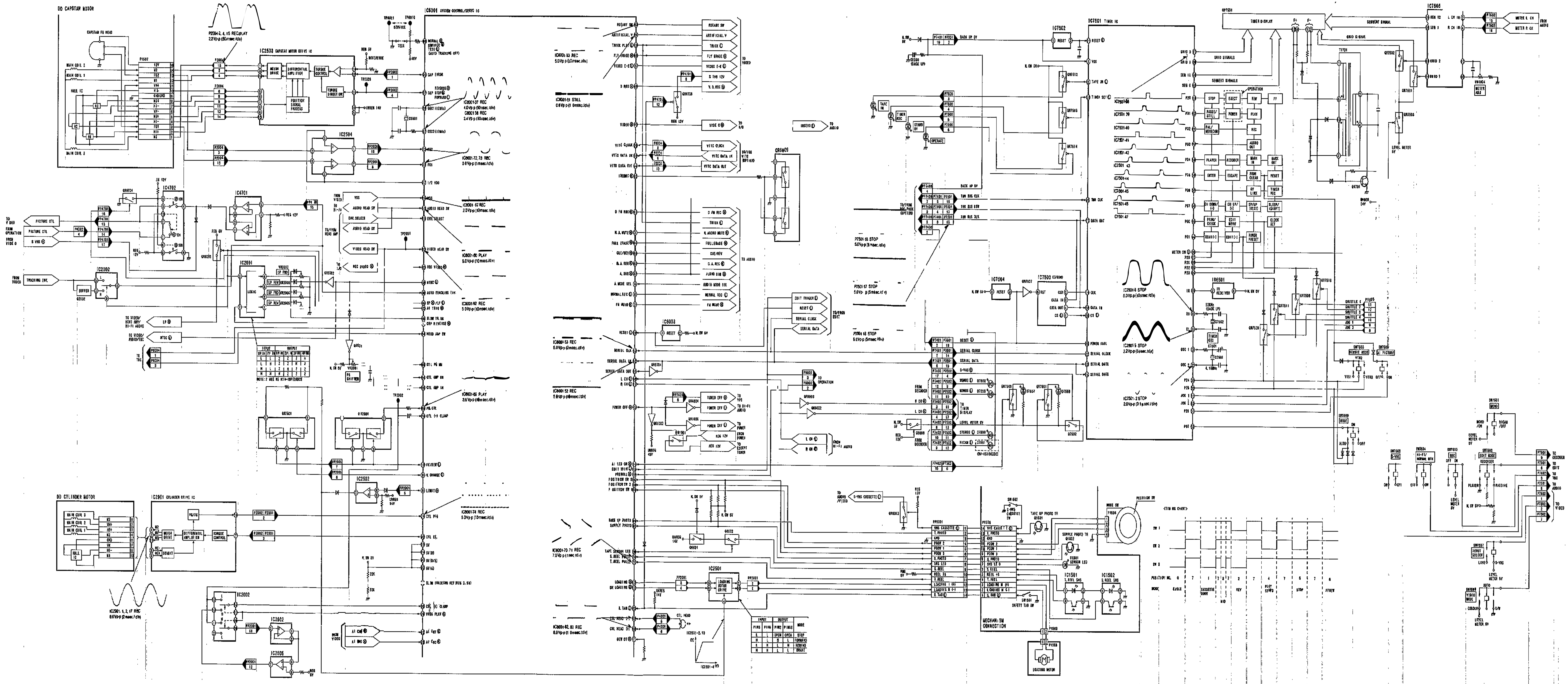
BASE	H	L
TR. SW	OFF	ON

R-S TYPE FLIP-FLOP

IN	(a)	L	L	⎍
	(b)	L	⎍	L
OUT	(c)	※	L	H
	(d)	◆	H	L

※ Initial condition is maintained.
◆ Initial condition is reversed.

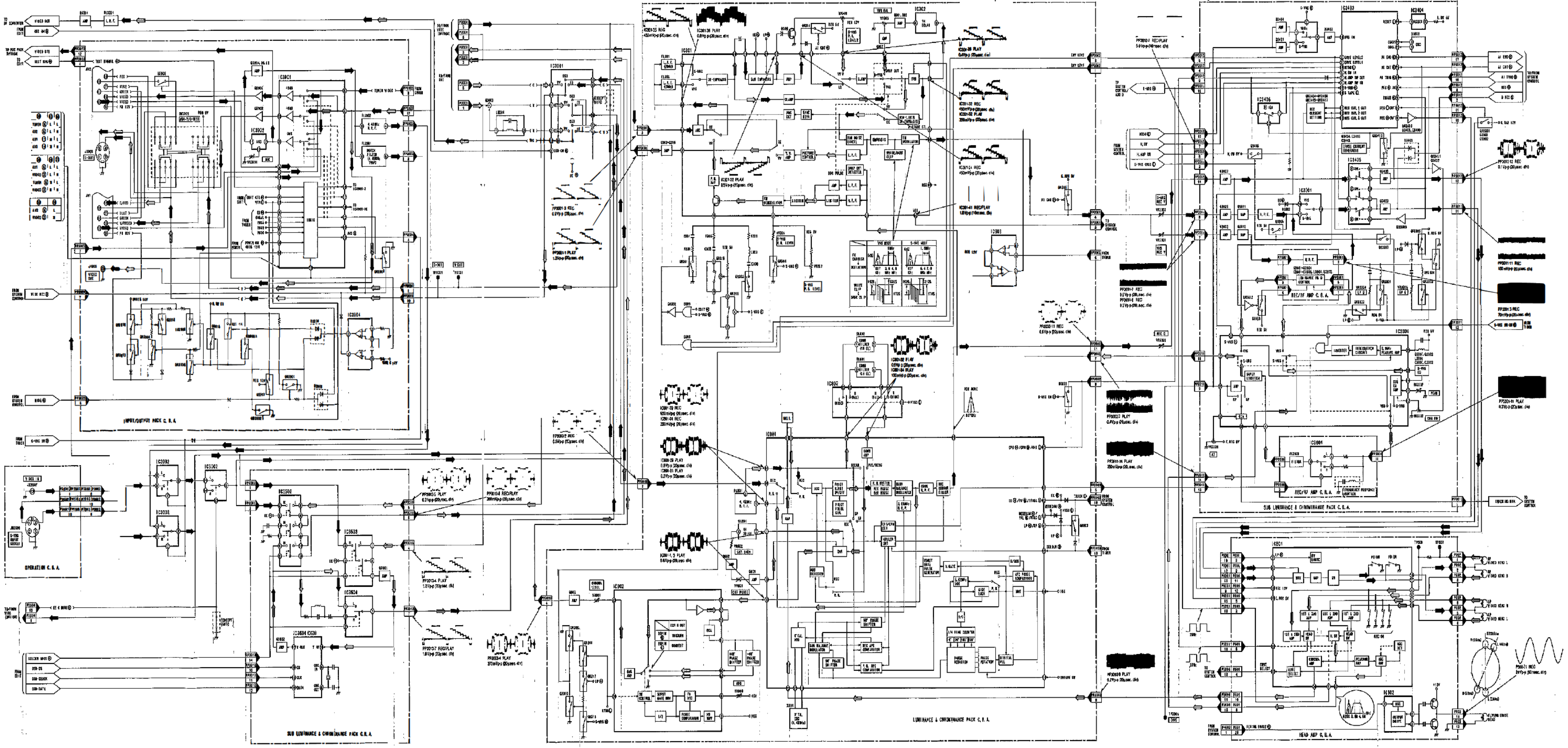
3-3. SYSTEM CONTROL & SERVO BLOCK DIAGRAM


DD CAPSTAN MOTOR
IC2503 CAPSTAN MOTOR DRIVE IC
IC6001 SYSTEM CONTROL/SERVO IC
IC2504
IC4702
IC4701
IC2002
IC2001
IC2502
DD CYLINDER MOTOR
IC2901 CYLINDER DRIVE IC
IC2603
IC6003
IC2501
IC7502
IC7501 TIMER IC
TIMER DISPLAY
IC7504
IC7503 EEPROM
MECHANISM CONNECTION
LOADING MOTOR
IC1501
IC1502
IC7506
TIMING CHART

3-4. LUMINANCE & CHROMINANCE BLOCK DIAGRAM

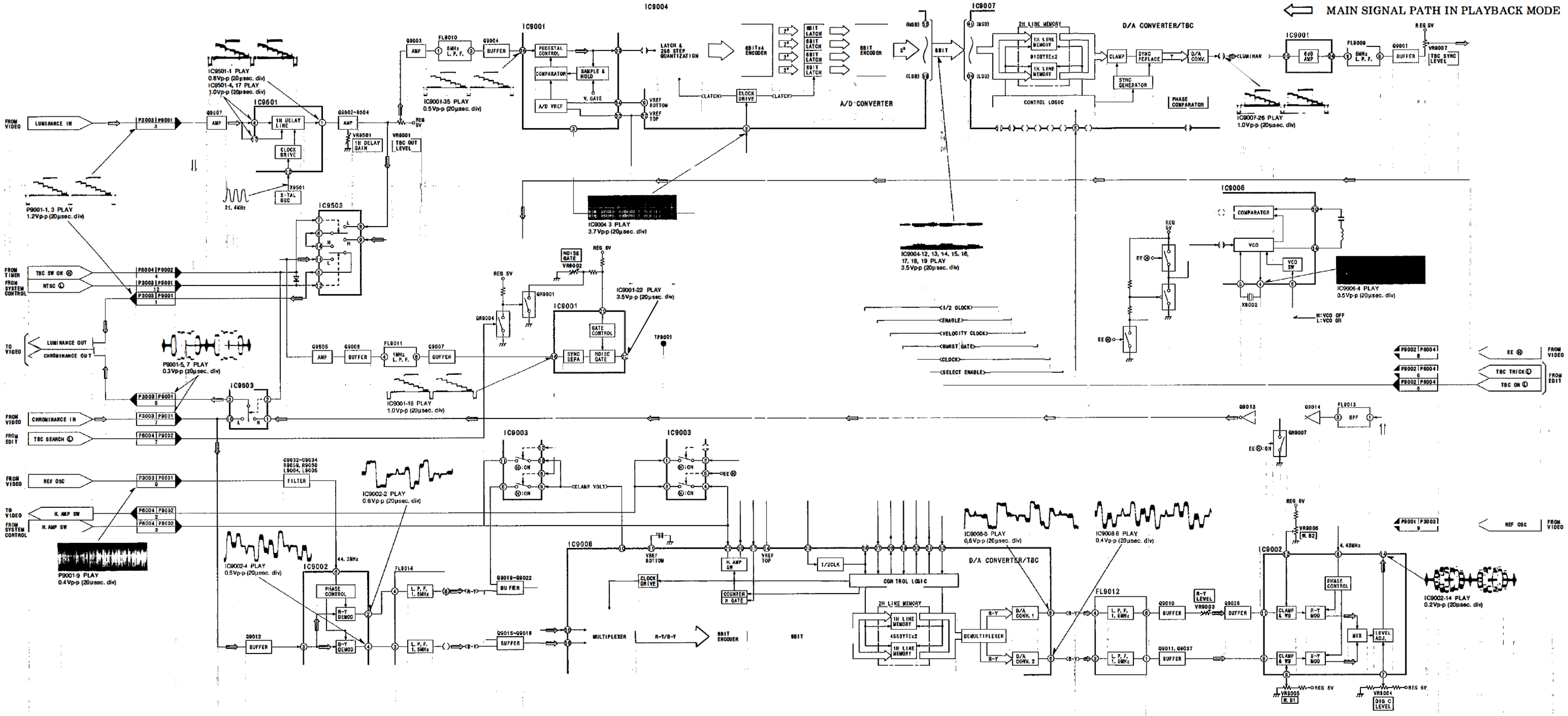
MAIN SIGNAL PATH IN REC MODE

MAIN SIGNAL PATH IN PLAYBACK MODE



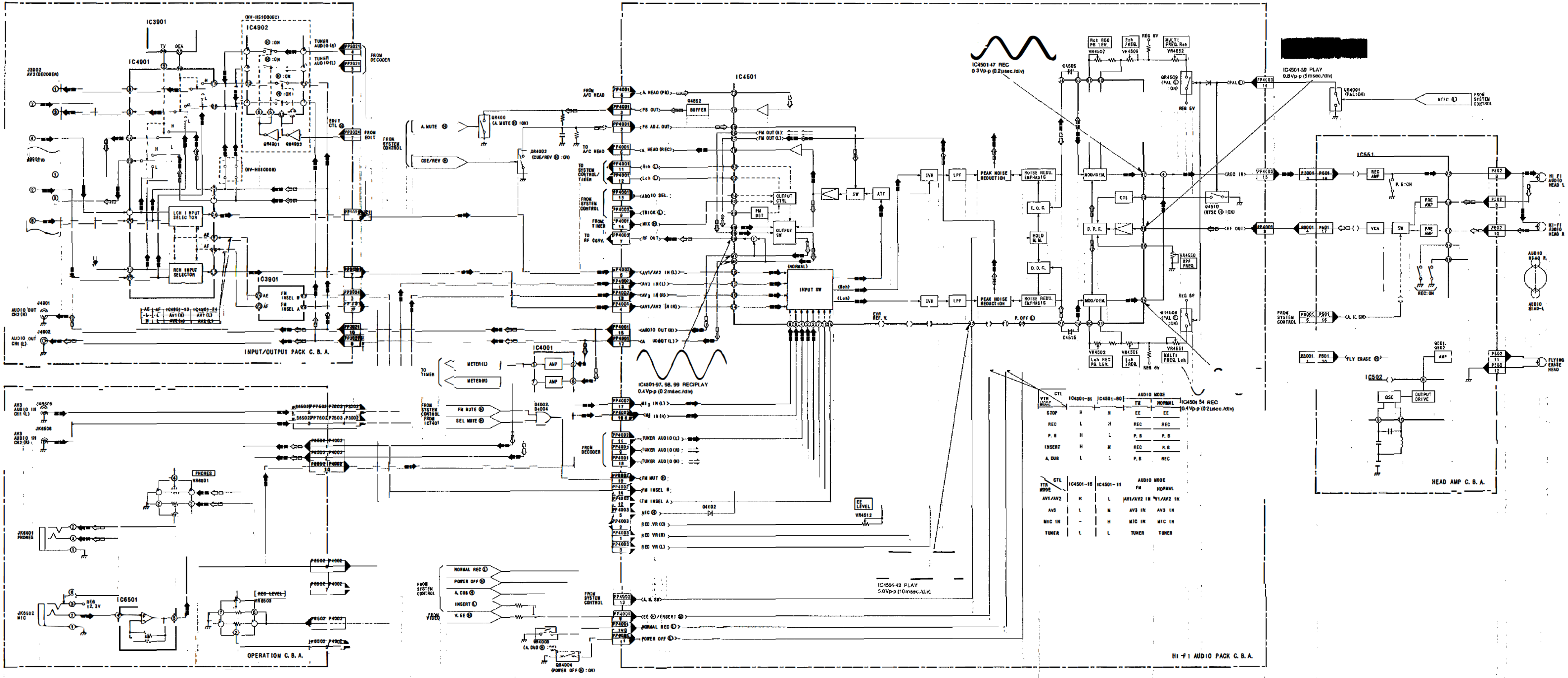
INPUT/OUTPUT PACK C.B.A.
OPERATION C.B.A.
SUB LUMINANCE & CHROMINANCE PACK C.B.A.
LUMINANCE & CHROMINANCE PACK C.B.A.
SUB LUMINANCE & CHROMINANCE PACK C.B.A.
REC/RF AMP C.B.A.
HEAD AMP C.B.A.

3-5. TBC BLOCK DIAGRAM


MAIN SIGNAL PATH IN PLAYBACK MODE
FROM VIDEO
LUMINANCE IN
P3003 P9001
Q9507 AMP
IC9501
1H DELAY LINE
CLOCK DRIVE
X9501 X-TAL OSC
21.4kHz
IC9501-1 PLAY 0.8Vp-p (20μsec. div)
IC9501-4, 17 PLAY 1.0Vp-p (20μsec. div)
P9001-1, 3 PLAY 1.2Vp-p (20μsec. div)
Q9502~9504 AMP
VR9501 1H DELAY GAIN
VR9001 TBC OUT LEVEL
REG 5V
Q9003 AMP
FL9010 5MHz L.P.F.
Q9004 BUFFER
IC9001-35 PLAY 0.5Vp-p (20μsec. div)
IC9001
PEDESTAL CONTROL
COMPARATOR
SAMPLE & HOLD
A/D VREF
V. GATE
VREF BOTTOM
VREF TOP
IC9004
LATCH & 256 STEP QUANTIZATION
8BIT×4 ENCODER
8BIT LATCH
8BIT ENCODER
CLOCK DRIVE
LATCH
A/D CONVERTER
(MSB)
(LSB)
8BIT
IC9007
2H LINE MEMORY
1H LINE MEMORY
910BYTE×2
D/A CONVERTER/TBC
CLAMP
SYNC REPLACE
D/A CONV.
SYNC GENERATOR
CONTROL LOGIC
PHASE COMPARATOR
LUMINAR
IC9001 6dB AMP
FL9009 5MHz L.P.F.
Q9001 BUFFER
VR9007 TBC SYNC LEVEL
IC9007-26 PLAY 1.0Vp-p (20μsec. div)
IC9004 3 PLAY 3.7Vp-p (20μsec. div)
IC9004-12, 13, 14, 15, 16, 17, 18, 19 PLAY 3.5Vp-p (20μsec. div)
IC9006
COMPARATOR
VCO
VCO SW
X9002
IC9006-4 PLAY 0.5Vp-p (20μsec. div)
H: VCO OFF
L: VCO ON
EE
1/2 CLOCK
ENABLE
VELOCITY CLOCK
BURST GATE
CLOCK
SELECT ENABLE
IC9503
FROM TIMER
TBC SW ON
FROM SYSTEM CONTROL
NTSC
P6004 P9002
TO VIDEO
LUMINANCE OUT
CHROMINANCE OUT
P9001-5, 7 PLAY 0.3Vp-p (20μsec. div)
Q9505 AMP
Q9006 BUFFER
FL9011 1MHz L.P.F.
Q9007 BUFFER
IC9001-16 PLAY 1.0Vp-p (20μsec. div)
NOISE GATE
VR9002
QR9001
QR9004
GATE CONTROL
SYNC SEPA
NOISE GATE
TP9001
IC9001-22 PLAY 3.5Vp-p (20μsec. div)
FROM VIDEO
EE
FROM EDIT
TBC TRICK
TBC ON
CHROMINANCE IN
FROM EDIT
TBC SEARCH
Q9013
Q9014
FL9013 BPF
QR9007
REF OSC
Q9032~Q9034 R9059, R9050 L9004, L9005
FILTER
IC9002-2 PLAY 0.6Vp-p (20μsec. div)
IC9003
CLAMP VOLT
H AMP SW
P9001-9 PLAY 0.4Vp-p (20μsec. div)
IC9002-4 PLAY 0.5Vp-p (20μsec. div)
IC9002
44.3MHz
PHASE CONTROL
R-Y DEMOD
B-Y DEMOD
Q9012 BUFFER
FL9014
L.P.F. 1.5MHz
Q9019~Q9022 BUFFER
Q9015~Q9018 BUFFER
R-Y
B-Y
IC9008
VREF BOTTOM
VREF TOP
CLOCK DRIVE
H.AMP SW
COUNTER H GATE
1/2CLK
MULTIPLEXER
R-Y/B-Y
8BIT ENCODER
8BIT
CONTROL LOGIC
2H LINE MEMORY
1H LINE MEMORY
455BYTE×2
DEMULTIPLEXER
D/A CONVERTER/TBC
D/A CONV. 1
D/A CONV. 2
IC9008-8 PLAY 0.6Vp-p (20μsec. div)
IC9008-6 PLAY 0.4Vp-p (20μsec. div)
FL9012
L.P.F. 1.5MHz
Q9010 BUFFER
Q9011, Q9027 BUFFER
R-Y LEVEL
VR9003
Q9026 BUFFER
VR9006 W. B2
4.43MHz
PHASE CONTROL
CLAMP & WB
R-Y MOD
B-Y MOD
MIX
LEVEL ADJ.
VR9005 W. B1
VR9004 DIG C LEVEL
IC9002-14 PLAY 0.2Vp-p (20μsec. div)
P9001 P3003
REF OSC
FROM VIDEO

3-6. Hi-Fi AUDIO BLOCK DIAGRAM

◀■ MAIN SIGNAL PATH IN REC MODE   ◁□ MAIN SIGNAL PATH IN PLAYBACK MODE



IC3901
IC4901
IC4902
(NV-HS1000EC)
J3802 AV2 (DECODER)
TUNER AUDIO (R)
TUNER AUDIO (L)
FROM DECODER
EDIT CTL
FROM EDIT
FROM SYSTEM CONTROL
LCH INPUT SELECTOR
RCH INPUT SELECTOR
AUDIO OUT CH2 (R)
AUDIO OUT CH1 (L)
INPUT/OUTPUT PACK C. B. A.
A. MUTE
CUE/REV
QR400
QR4002
IC4001
AMP
METER (L)
METER (R)
TO TIMER
IC4501
BUFFER
INPUT SW
OUTPUT CTRL
OUTPUT SW
FM DET
SW
ATT
EVR
LPF
PEAK NOISE REDUCTION
NOISE REDU. EMPHASIS
MOD/DEM.
D.O.C.
HOLD M.M.
B.P.F.
CTL
VR4507 Rch REC PB LEV.
VR4509 Rch FREQ.
VR4552 MULTI FREQ. Rch
VR4502 Lch REC PB LEV.
VR4501 Lch FREQ.
VR4551 MULTI FREQ. Lch
VR4550 BPF FREQ.
REG 5V
QR4509
QR4508
Q4510
QR4001
NTSC
IC551
REC AMP
PRE AMP
VCA
HI-FI AUDIO HEAD L
HI-FI AUDIO HEAD R
AUDIO HEAD R
AUDIO HEAD L
FLYING ERASE HEAD
IC502
OSC
OUTPUT DRIVE
HEAD AMP C. B. A.
AV3 AUDIO IN CH1 (L)
AV3 AUDIO IN CH2 (R)
JK6506
JK6501 PHONES
VR6501
JK6502 MIC
IC6501
REC LEVEL VR6503
OPERATION C. B. A.
FM MUTE
SEL MUTE
NORMAL REC
POWER OFF
A. DUB
INSERT
V. EE
QR4005
QR4004
EE LEVEL VR4512
HI-FI AUDIO PACK C. B. A.

[redacted]

IC4501-47 REC
0.3Vp-p (0.2μsec./div)

IC4501-38 PLAY
0.8Vp-p (5msec./div)

IC4501-97, 98, 99 REC/PLAY
0.4Vp-p (0.2msec./div)

IC4501 34 REC
0.4Vp-p (0.2μsec./div)

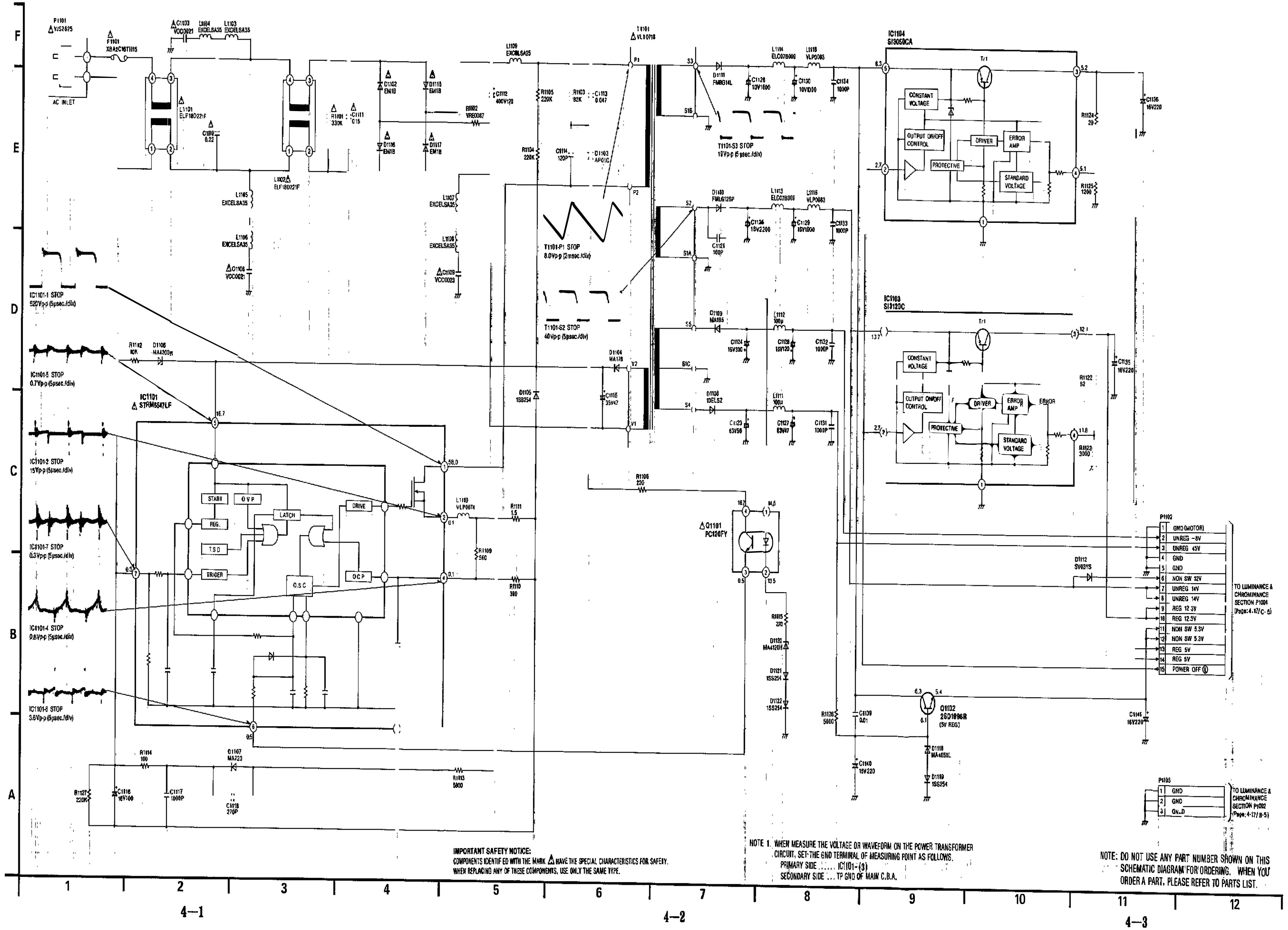
IC4501-42 PLAY
5.0Vp-p (10msec./div)

VTR MODE \ CTL	IC4501-81	IC4501-80	AUDIO MODE FM	AUDIO MODE NORMAL
STOP	H	H	EE	EE
REC	L	H	REC	REC
P. B	H	L	P. B	P. B
INSERT	H	H	REC	P. B
A. DUB	L	L	P. B	REC

VTR MODE \ CTL	IC4501-15	IC4501-11	AUDIO MODE FM	AUDIO MODE NORMAL
AV1/AV2	H	L	AV1/AV2 IN	AV1/AV2 IN
AV3	L	H	AV3 IN	AV3 IN
MIC IN	-	H	MIC IN	MIC IN
TUNER	L	L	TUNER	TUNER

SECTION 4
SCHEMATIC DIAGRAMS

4-1. POWER SCHEMATIC DIAGRAM


F
E
D
C
B
A
P1101
△VJS2625
AC INLET
△F1101
XBA2C16TII15
△C1103
VCC0021
L1104
EXCELSA35
L1103
EXCELSA35
△L1101
ELF18D221F
△C1110
0.22
L1102△
ELF18D221F
L1105
EXCELSA35
L1106
EXCELSA35
△C1106
VCC0021
△R1101
330K
△C1111
015
△D1102
EM1B
△D1115
EM1B
△D1116
EM1B
△D1117
EM1B
R1102
VRE0087
C1112
400V120
L1107
EXCELSA35
L1108
EXCELSA35
△C1109
VCC0023
L1109
EXCELSA35
R1105
220K
R1103
82K
C1113
0.047
R1104
220K
C1114
120P
D1103
AP01C
T1101-P1 STOP
8.0Vp-p (2msec./div)
T1101-S2 STOP
40Vp-p (5μsec./div)
T1101
△VLT0718
P1
P2
V1
V2
S3
S1B
S2
S1A
S5
S1C
S4
D1111
FMBG14L
C1126
10V1800
L1114
ELC07B009
C1130
10V1000
L1118
VLP0083
C1134
1000P
T1101-S3 STOP
19Vp-p (5μsec./div)
D1110
FMLG12SP
C1121
100P
C1125
16V2200
L1113
ELC07B009
C1129
16V1000
L1115
VLP0083
C1133
1000P
D1109
MA185
C1124
16V330
L1112
100μ
C1128
16V120
C1132
1000P
D1108
10EL52
C1123
63V56
L1111
100μ
C1127
63V47
C1131
1000P
D1104
MA178
C1115
35V47
D1105
1SS254
IC1104
SI3050CA
IC1103
SI3120C
Tr1
CONSTANT VOLTAGE
OUTPUT ON/OFF CONTROL
PROTECTIVE
DRIVER
ERROR AMP
STANDARD VOLTAGE
6.3
2.7
5.2
5.1
13.7
12.1
11.8
R1124
20
R1125
1200
C1136
16V220
R1122
82
R1123
3000
C1135
16V220
IC1101-1 STOP
520Vp-p (5μsec./div)
IC1101-5 STOP
0.7Vp-p (5μsec./div)
IC1101-2 STOP
15Vp-p (5μsec./div)
IC1101-7 STOP
0.3Vp-p (5μsec./div)
IC1101-4 STOP
0.6Vp-p (5μsec./div)
IC1101-8 STOP
3.6Vp-p (5μsec./div)
R1112
10K
D1106
MA4200
IC1101
△STRM6547LF
16.7
58.0
0.1
0.3
0.5
START
OVP
REG.
LATCH
T.S.D
TRIGER
DRIVE
O.S.C
OCP
L1110
VLP0074
R1111
1.5
R1109
560
R1110
390
R1114
100
D1107
MA723
R1113
5600
R1127
220K
C1116
16V100
C1117
1000P
C1118
270P
R1106
220
△Q1101
PC120FY
14.5
13.5
R1115
270
D1120
MA4120H
D1121
1SS254
D1122
1SS254
R1126
5600
C1139
0.01
C1140
16V220
Q1102
2SD1896R
(5V REG)
5.4
6.1
D1118
MA4056L
D1119
1SS254
C1141
16V220
D1112
SV03YS
P1102
1 GND (MOTOR)
2 UNREG −8V
3 UNREG 45V
4 GND
5 GND
6 NON SW 12V
7 UNREG 14V
8 UNREG 14V
9 REG 12.3V
10 REG 12.3V
11 NON SW 5.3V
12 NON SW 5.3V
13 REG 5V
14 REG 5V
15 POWER OFF Ⓛ
TO LUMINANCE & CHROMINANCE SECTION P1001 (Page: 4-17/C-5)
P1103
1 GND
2 GND
3 GND
TO LUMINANCE & CHROMINANCE SECTION P1002 (Page: 4-17/B-5)
1
2
3
4
5
6
7
8
9
10
11
12
4—1
4—2
4—3

IMPORTANT SAFETY NOTICE:
COMPONENTS IDENTIFIED WITH THE MARK △ HAVE THE SPECIAL CHARACTERISTICS FOR SAFETY.
WHEN REPLACING ANY OF THESE COMPONENTS, USE ONLY THE SAME TYPE.

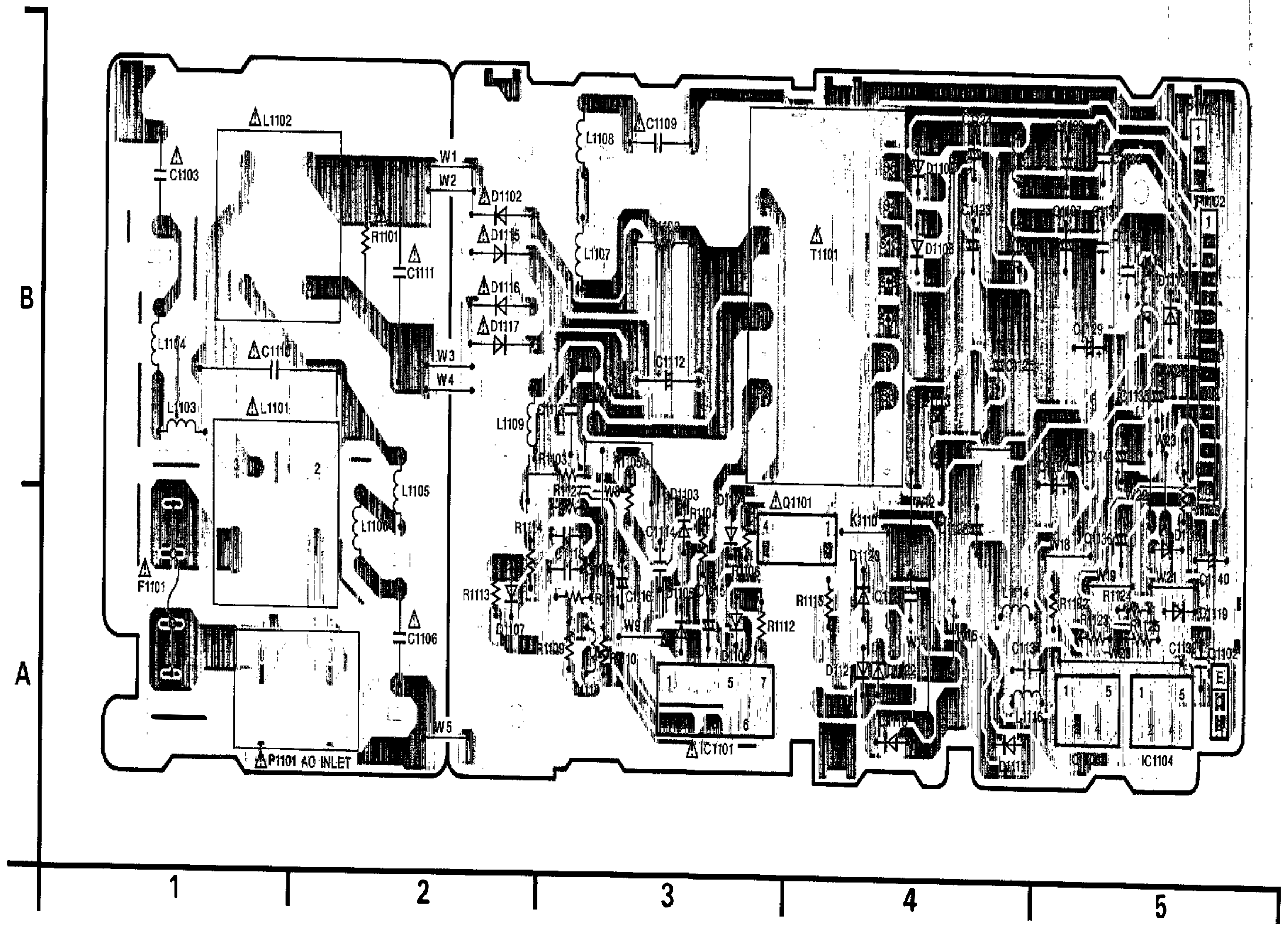
NOTE 1. WHEN MEASURE THE VOLTAGE OR WAVEFORM ON THE POWER TRANSFORMER CIRCUIT, SET THE GND TERMINAL OF MEASURING POINT AS FOLLOWS.
PRIMARY SIDE ...... IC1101-(3)
SECONDARY SIDE ... TP GND OF MAIN C.B.A.

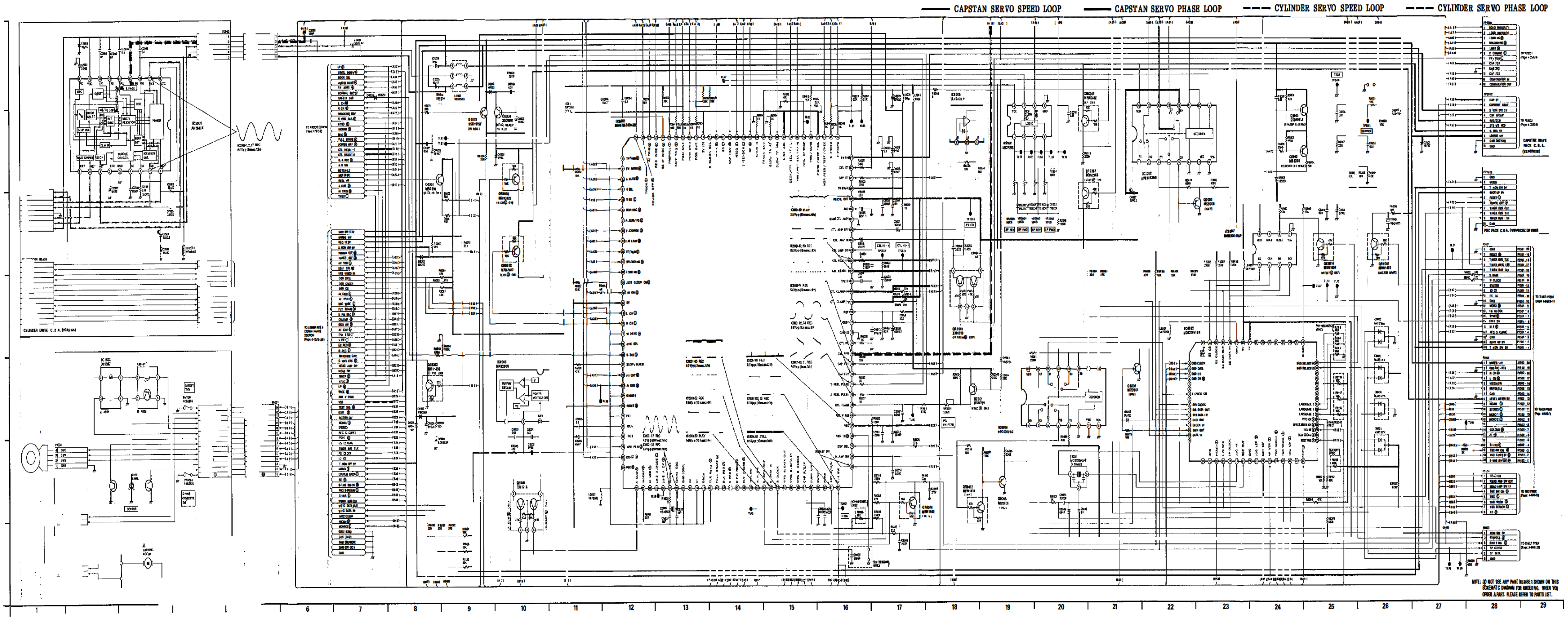
NOTE: DO NOT USE ANY PART NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR ORDERING. WHEN YOU ORDER A PART, PLEASE REFER TO PARTS LIST.

4-2. POWER C.B.A. (VEP01558C)

POWER C.B.A.	
Translator	
Q1101	A-4
Q1102	A-5
Integrated Circuit	
IC1101	A-3
IC1103	A-5
IC1104	A-5
Connector	
P1101	A-1
P1102	B-5
P1103	B-5

ADDRESS INFORMATION


B
A
△L1102
△C1103
L1108
C1109
W1
W2
△D1102
△D1115
△D1116
△D1117
R1101
△C1111
L1107
△T1101
L1104
△C1110
△L1101
L1103
W3
W4
L1109
C1112
L1105
L1106
△C1106
F1101
△P1101 AC INLET
W5
△Q1101
R1113
R1112
R1115
△IC1101
IC1104
1
2
3
4
5
4—4
4—5


CAPSTAN SERVO SPEED LOOP
CAPSTAN SERVO PHASE LOOP
CYLINDER SERVO SPEED LOOP
CYLINDER SERVO PHASE LOOP
CYLINDER DRIVE C.B.A.
CAPSTAN DRIVE PACK C.B.A.
TO TIMER P1504
SP CLOCK
SP DATA
GND
1
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29

NOTE : DO NOT USE ANY PART NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR ORDERING. WHEN YOU ORDER A PART, PLEASE REFER TO PARTS LIST.

SYSTEM CONTROL & SERVO ICs DC VOLTAGE CHART (S-VHS: SP MODE)

REF. NO.	IC2001							
MODE	1	2	3	4	5	6	7	6
STOP	0	5.0	0	0	0	5.0	0	5.0
PLAY	0	5.0	0	0	0	5.0	0	5.0
REC	0	4.9	0	0	0	5.0	0	5.0
F.F	0	5.0	0	0	0	5.0	0	5.0
REW	5.0	0	0	0	0	5.0	5.0	5.0

REF. NO.	IC2002															
MODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	18
STOP	2.5	2.3	1.4	1.4	1.0	0	0	0	5.0	0	0	2.6	0	2.6	2.3	5.2
PLAY	2.6	2.3	2.6	2.6	2.0	0	0	0	5.0	0	0	2.5	0	2.5	2.3	5.2
REC	2.5	2.3	1.1	1.1	0.6	0	0	0	5.0	0	0	2.6	0	2.6	2.3	5.2
F.F	2.5	2.3	1.8	1.6	1.0	0	0	0	5.0	0	0	2.6	0	2.6	2.3	5.2
REW	2.5	2.3	1.2	1.2	0.6	0	0	0	5.0	0	0	2.6	0	2.6	2.3	5.2

REF. NO.	IC2901																	
MODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
STOP	14.8	14.6	0.1	1.2	0.1	2.6	2.5	2.8	2.5	2.7	5.2	3.8	3.9	3.8	1.2	14.4	14.6	0.1
PLAY	14.5	13.9	0.1	1.1	0.1	2.6	2.5	2.6	2.5	2.8	5.2	3.9	3.9	3.8	1.5	14.3	14.4	0.1
REC	14.8	14.7	0.1	1.2	0.1	2.8	2.5	2.8	2.5	2.8	5.2	3.9	3.9	3.9	1.4	14.3	14.4	0.1
F.F	14.1	13.8	0.1	1.1	0.1	2.6	2.5	2.6	2.5	2.8	5.2	3.9	3.8	3.8	1.5	14.3	13.7	0.1
REW	14.5	13.5	0.1	1.1	0.1	2.8	2.5	2.6	2.5	2.8	5.2	3.8	3.8	3.9	1.5	14.3	14.5	0.1

REF. NO.	IC6001																			
MODE	1	2	3	4	5	8	7	8	9	10	11	12	13	14	15	16	17	18	19	20
STOP	0	0.1	0	5.0	0.1	5.0	5.0	4.9	0.1	4.9	0	0	5.0	4.9	5.0	0	0	0	0	0
PLAY	0	0.1	0	5.0	5.0	5.0	5.0	4.9	0.1	4.9	0	0	5.0	4.9	5.0	0	0	0	0	0
REC	0	0.1	0	5.0	0.1	0	5.0	4.9	0.1	4.9	0	0	5.0	4.9	5.0	0	0	0	0	0
F.F	0	0.1	0	5.0	0.1	5.0	5.0	0	0.1	0	0	0	5.0	4.9	5.0	0	0	0	0	0
REW	0	0.1	0	5.0	0.1	5.0	5.0	0	0.1	0	0	0	5.0	4.9	5.0	0	0	0	0	0

REF. NO.	IC6001																			
MODE	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
STOP	5.0	0.1	5.0	0	5.0	0	0	0	0	0	0	0	0	5.0	5.0	0	2.7	2.7	0	5.0
PLAY	5.0	0.1	0.2	0	5.0	0	0	0	0	0	0	0	0	5.0	5.0	0	2.7	2.7	0	5.0
REC	5.0	0.1	5.0	0	5.0	0	0	0	0	4.9	5.0	0	0	5.0	5.0	0	2.7	2.7	0	5.0
F.F	5.0	0.1	5.0	0	5.0	0	0	0	0	0	0	0	0	5.0	5.0	0	2.7	2.7	0	5.0
REW	5.0	0.1	5.0	0	5.0	0	0	0	0	0	0	0	0	5.0	5.0	0	2.7	2.7	0	5.0

REF. NO.	IC6001																			
MODE	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
STOP	0	0	0	0	0	0.1	0	0	5.0	0	1.8	0.9	4.5	4.8	5.0	4.8	2.0	0	2.6	2.5
PLAY	0	0	0	0	0	0.1	0	0	5.0	3.7	1.7	0.9	4.5	4.8	5.0	4.8	0	5.0	2.7	2.5
REC	0	0	0	5.0	5.0	5.0	5.0	0	5.0	0	1.7	0.9	4.5	4.8	5.0	4.8	0	5.0	2.6	2.5
F.F	0	0	0	0	0	0.1	0	0	5.0	0	1.7	0.8	4.5	4.8	5.0	4.8	0	5.0	5.0	2.5
REW	0	0	0	0	0	0.1	0	0	5.0	0	1.7	0.9	4.5	4.8	5.0	4.8	5.0	5.0	5.0	2.5

REF. NO.	IC6001																			
MODE	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80
STOP	0	5.0	5.0	0	4.0	5.0	2.5	0.3	3.5	5.0	0	2.5	2.5	1.5	0	0	2.5	2.5	2.4	2.6
PLAY	0	3.7	5.0	0	4.0	5.0	2.5	0.3	3.7	5.0	5.0	2.5	2.5	1.5	0	0	2.5	2.5	3.0	2.5
REC	0	5.0	5.0	0	4.5	5.0	2.5	0.3	3.8	5.0	5.0	2.5	2.5	1.5	0	0	2.5	2.5	2.4	2.6
F.F	0	5.0	5.0	0	2.4	5.0	2.5	0.3	3.7	2.5	2.9	2.5	2.5	1.2	0	0	2.5	2.5	2.5	2.6
REW	0	4.0	3.6	0	2.5	5.0	2.5	0.3	3.7	2.7	2.5	2.5	2.5	1.3	0	0	2.5	2.5	2.5	2.6

REF. NO.	IC6001																			
MODE	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
STOP	4.9	0	0	0	2.5	2.5	0	2.7	2.5	5.0	1.4	2.5	5.0	3.5	5.0	5.0	5.0	3.5	0	3.5
PLAY	5.0	0	0	0	2.5	2.5	0	3.0	2.5	5.0	2.5	2.5	5.0	4.1	5.0	5.0	5.0	3.5	0	3.5
REC	4.9	3.7	3.9	0	2.5	2.5	0	2.7	2.5	5.0	2.7	2.5	5.0	4.1	4.8	5.0	5.0	3.5	0	3.5
F.F	5.0	0	0	0	2.5	2.5	0	3.1	2.5	5.0	2.3	2.5	5.0	4.4	4.9	5.0	5.0	3.5	0	3.5
REW	5.0	0	0	0	2.5	2.5	0	3.1	2.5	5.0	2.4	2.5	5.0	4.4	4.9	5.0	5.0	3.5	0	3.5

REF. NO.	IC6001																			
MODE	101	102	103	104	105	106	107	108	109	110	111	112	113	114	115	116	117	118	119	120
STOP	3.5	5.0	2.3	0	1.6	0	5.0	5.0	5.0	0	5.0	0	4.5	5.0	0	0	5.0	5.0	0	0
PLAY	3.5	5.0	2.8	0	2.7	0	5.0	0.2	5.0	0	5.0	0	4.5	5.0	0	0	5.0	5.0	0	0
REC	3.5	5.0	2.6	0	1.2	0	5.0	0.2	5.0	0	5.0	0	4.5	5.0	0	0	5.0	5.0	0	0
F.F	3.5	5.0	2.8	0	1.2	0	5.0	0.2	5.0	0	5.0	0	4.5	5.0	0	5.0	5.0	5.0	0	0
REW	3.5	5.0	2.3	0	1.2	0	5.0	0.2	5.0	5.0	5.0	0	4.5	5.0	0	5.0	5.0	5.0	0	0

REF. NO.	IC6001			
MODE	121	122	123	124
STOP	0	0	0	5.0
PLAY	0	0	0	5.0
REC	0	0	0	5.0
F.F	0	0	0	5.0
REW	0	0	0	5.0

REF. NO.	IC6002																			
MODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
STOP	4.8	4.7	4.6	0	0	0	5.0	0	4.5	0.9	0.9	0	4.8	3.1	4.7	0	0	0	4.9	5.0
PLAY	4.8	4.7	4.6	0	0	0	5.0	0	4.5	1.0	1.0	0	4.8	3.1	4.7	0	0	0	4.9	5.0
REC	4.8	4.7	4.6	0	0	0	5.0	0	4.5	1.0	1.0	0	4.8	3.1	4.7	0	0	0	4.9	5.0
F.F	4.8	4.7	4.6	0	0	0	5.0	0	4.5	1.0	1.0	0	4.8	3.1	4.7	0	0	0	4.9	5.0
REW	4.8	4.7	4.8	0	0	0	5.0	0	4.5	1.0	1.0	0	4.8	3.1	4.7	0	0	0	4.9	5.0

REF. NO.	IC6002																			
MODE	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
STOP	5.0	2.2	2.4	0	0	0	5.0	5.0	5.0	5.0	0	0	0	0.2	0	0	4.5	0	0	0
PLAY	5.0	2.2	2.4	0	0	0	0	5.0	5.0	0	0	0	0	0.2	0	0	4.5	0	0	0
REC	5.0	2.2	2.4	0	0	0	0	5.0	5.0	5.0	0	0	0	0.2	0	0	4.5	0	0	0
F.F	5.0	2.2	2.4	0	0	0	0	5.0	5.0	5.0	0	0	0	0.2	0	0	4.5	0	0	0
REW	5.0	2.2	2.4	0	0	0	0	5.0	5.0	5.0	0	0	0	0.2	0	0	4.5	0	0	0

REF. NO.	IC6002																			
MODE	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
STOP	0	0	0	0	0	0	5.0	0	5.0	0	0	0	0	0	0	0	5.0	5.0	0	5.0
PLAY	0	0	0	0	0	0	5.0	0	5.0	0	0	0	0	0	0	0	5.0	5.0	0	5.0
REC	0	0	0	0	0	0	5.0	0	5.0	0	0	0	0	0	0	0	5.0	5.0	0	5.0
F.F	0	0	0	0	0	0	5.0	0	5.0	0	0	0	0	0	0	0	5.0	5.0	0	5.0
REW	0	0	0	0	0	0	5.0	0	5.0	0	0	0	0	0	0	0	5.0	5.0	0	5.0

REF. NO.	IC6002			
MODE	61	82	63	84
STOP	0.1	5.0	5.0	5.0
PLAY	0.1	5.0	5.0	5.0
REC	0.1	5.0	5.0	5.0
F.F	0.1	5.0	5.0	5.0
REW	0.1	5.0	5.0	5.0

REF. NO.	IC6003		
MODE	1	2	3
STOP	5.0	5.0	0
PLAY	5.0	5.0	0
REC	5.0	5.0	0
F.F	5.0	5.0	0
REW	5.0	5.0	0

REF. NO.	IC6005															
MODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
STOP	5.0	4.8	4.8	4.3	5.0	0	0	0	5.0	0	5.0	5.0	4.8	5.0	4.8	5.0
PLAY	5.0	4.8	4.8	4.3	5.0	0	0	0	5.0	0	5.0	5.0	4.7	5.0	4.6	5.0
REC	5.0	4.8	4.8	4.3	5.0	0	0	0	5.0	0	5.0	5.0	4.7	5.0	4.8	5.0
F.F	5.0	4.8	4.8	4.3	5.0	0	0	0	5.0	0	5.0	5.0	4.7	5.0	4.7	5.0
REW	5.0	4.8	4.8	4.3	5.0	0	0	0	5.0	0	5.0	5.0	4.7	5.0	4.7	5.0

REF. NO.	IC6007								IC6008		
MODE	1	2	3	4	5	6	7	8	1	2	3
STOP	5.0	5.0	0.1	5.0	0	0	5.0	5.0	2.3	0	2.9
PLAY	5.0	5.0	0.1	5.0	0	0	5.0	5.0	2.3	0	2.9
REC	5.0	5.0	0.1	5.0	0	0	5.0	5.0	2.3	0	2.9
F.F	5.0	5.0	0.1	5.0	0	0	5.0	5.0	2.3	0	2.9
REW	5.0	5.0	0.1	5.0	0	0	5.0	5.0	2.3	0	2.9

SYSTEM CONTROL & SERVO TRANSISTORs DC VOLTAGE CHART (S-VHS: SP MODE)

REF. NO.	Q2001			Q2002			Q6001			Q6002			Q6003			Q6004		
MODE	E	C	B	E	C	B	E	C	B	E	C	B	E	C	B	E	C	B
STOP	5.0	4.8	5.0	1.6	0	1.0	5.1	14.4	5.6	5.1	−0.2	5.0	5.2	5.4	5.9	5.0	5.0	5.7
PLAY	5.0	4.8	5.0	2.8	0	2.0	5.0	14.4	5.8	5.0	4.8	4.2	5.2	5.4	5.9	5.0	5.0	5.7
REC	5.0	4.8	4.9	1.1	0	0.5	4.9	14.3	5.6	4.9	4.8	4.2	5.2	5.4	5.9	5.0	5.0	5.5
F.F	5.0	4.8	5.0	1.1	0	1.1	5.0	14.3	5.8	5.0	4.9	4.2	5.2	5.4	5.9	5.0	5.0	5.7
REW	5.0	4.8	5.0	1.1	0	0.5	5.0	14.3	5.6	5.0	4.8	4.2	5.2	5.4	5.9	5.0	5.0	5.7

REF. NO.	Q6005			Q6006			Q6008		
MODE	E	C	B	E	C	B	E	C	B
STOP	0	4.9	0.1	0	4.7	0.1	5.0	5.1	5.8
PLAY	0	4.9	0.1	0	4.7	0.1	5.0	5.1	5.8
REC	0	4.9	0.1	0	4.7	0.1	5.0	5.1	5.8
F.F	0	4.8	0.1	0	4.7	0.1	5.0	5.1	5.8
REW	0	4.8	0.1	0	4.7	0.1	5.0	5.1	5.8

REF. NO.	QR2001					QR2002			QR6001			QR6002			QR6003		
MODE	1	2	3	4	5	E	C	B	E	C	B	E	C	B	E	C	B
STOP	0	0	4.9	0	4.9	5.0	0	5.0	0	0	5.0	5.0	5.0	0	5.0	5.0	0
PLAY	0	0	4.9	0	4.9	5.0	0	5.0	0	0	5.0	5.0	5.0	0	5.0	5.0	0
REC	0	0	4.9	0	4.9	5.0	0	5.0	0	0	5.0	5.0	5.0	0	5.0	5.0	0
F.F	0	1.0	0	0	0	5.0	0	5.0	0	0	5.0	5.0	5.0	0	5.0	5.0	0
REW	0	1.0	0	0	0	5.0	0	5.0	0	0	5.0	5.0	5.0	0	5.0	5.0	0

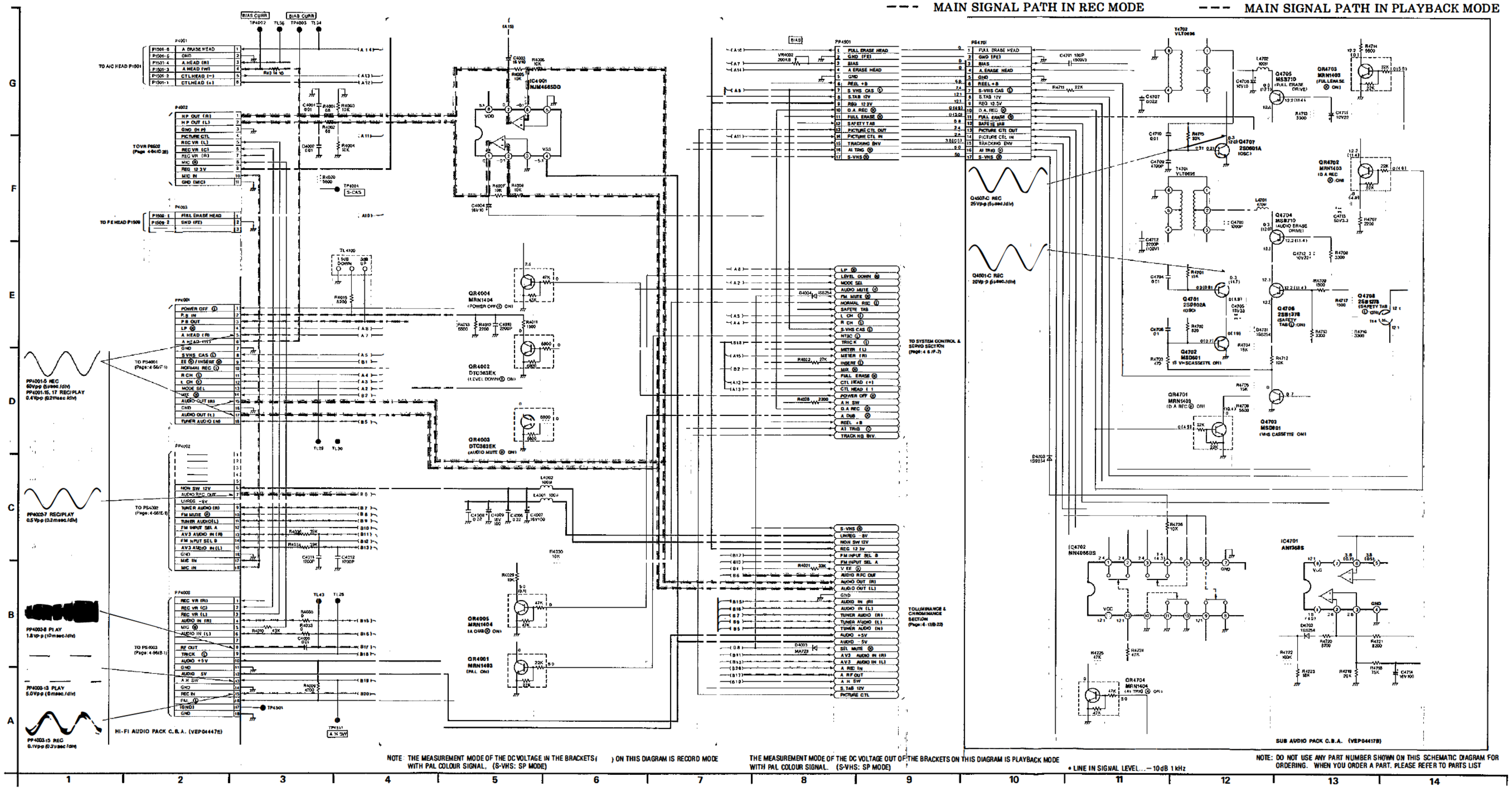
REF. NO.	QR6004			QR6009					QR6012			QR6013			QR6014		
MODE	E	C	B	1	2	3	4	5	E	C	B	E	C	B	E	C	B
STOP	0	0.9	1.7	5.1	0	0	0	0	0	0.1	4.3	0	0	7.0	0	0	4.9
PLAY	0	0.9	1.7	0.5	0	0	0	0	0	0.1	4.3	0	0	7.0	0	0	4.9
REC	0	1.0	1.7	5.1	0	0	0	0	0	0.1	4.3	0	0	7.0	0	0	4.9
F.F	0	1.0	1.7	5.1	0	0	0	0	0	0.1	4.3	0	0	7.0	0	0	4.9
REW	0	0.9	1.7	5.1	0	0	0	0	0	0.1	4.3	0	0	7.0	0	0	4.9

REF. NO.	QR6015		
MODE	E	C	B
STOP	5.2	0.3	5.0
PLAY	5.2	0.3	5.0
REC	5.2	0.3	5.0
F.F	5.2	0.3	5.0
REW	5.2	0.3	5.0

INPUT/OUTPUT CHART FOR IC6002 (M38024V1BK)

PIN NO.	I/O	PORT NAME	PIN NO.	I/O	PORT NAME	PIN NO.	I/O	PORT NAME
1	O	OSD CLK	20	I	L CLK	37	I	VITC OK (H)
2	O	OSD DATA	21	I	5P CLK	38	I	LANGUAGE 2
3	O	OSD CS	22	I	OSC IN	39	I	LANGUAGE 1
4	O	OSD ON (H)	23	O	OSC OUT	40	I	LANGUAGE 0
5, 6	–	—	24	–	GND	41–46	–	—
7	I	L CLK CNT	25	O	JOG LED (H)	47	O	BUS SELECT (B)
8	–	—	26	O	EDIT 21P	48	O	BUS SELECT (A)
9	I	SYS CLK	27	O	AV VTR (L)	49	I	CHECK (L)
10	O	SYS OUT	28	O	TBC SEARCH Ⓛ	50–56	–	—
11	I	SYS IN	29	O	TBC TRICK Ⓛ	57, 58	I	VDD
12	O	DATA INH	30	O	TBC ON Ⓛ	59	–	GND
13	I	CLK INPUT	31	–	—	60	I	EE DATA IN
14	O	DATA OUT	32	O	EDIT (H)	61	O	EE DATA OUT
15	I	DATA IN	33	I	TEST SIGNAL (H)	62	O	EE CLK
16, 17	–	—	34	–	—	63	O	EE CS
18	–	GND	35	O	INSIDE (H)	64	I	REC/P1/P2
19	I	RESET (L)	36	I	SERCH MUTE OK (H)			

4-4. AUDIO SECTION IN MAIN & SUB AUDIO PACK SCHEMATIC DIAGRAM



MAIN SIGNAL PATH IN REC MODE
MAIN SIGNAL PATH IN PLAYBACK MODE
TO A/C HEAD P1501
TO VR P6502
TO FE HEAD P1509
TO PS4001
TO PS4002
TO PS1003
IC4001 NJM4565DD
QR4004 MRN1404 (POWER OFF ON)
QR4002 DTC363EK (LEVEL DOWN ON)
QR4003 DTC363EK (AUDIO MUTE ON)
QR4005 MRN1404 (A DUB ON)
QR4001 MRN1403 (PAL ON)
HI-FI AUDIO PACK C.B.A. (VEP04447B)
TO SYSTEM CONTROL & SERVO SECTION
TO LUMINANCE & CHROMINANCE SECTION
Q4705 MSB710 (FULL ERASE DRIVE)
QR4703 MRN1403 (FULL ERASE ON)
Q4707 2SD601A (OSC)
QR4702 MRN1403 (D.A REC ON)
Q4704 MSB710 (AUDIO ERASE DRIVE)
Q4701 2SD602A (OSC)
Q4706 2SB1378 (SAFETY TAB ON)
Q4702 MSD601 (S-VHS CASSETTE ON)
QR4701 MRN1403 (D.A REC ON)
Q4703 MSD601 (VHS CASSETTE ON)
IC4702 MN4066BS
IC4701 AN1368S
QR4704 MRN1404 (A1 TRIG ON)
SUB AUDIO PACK C.B.A. (VEP04417B)
A
B
C
D
E
F
G
1
2
3
4
5
6
7
8
9
10
11
12
13
14

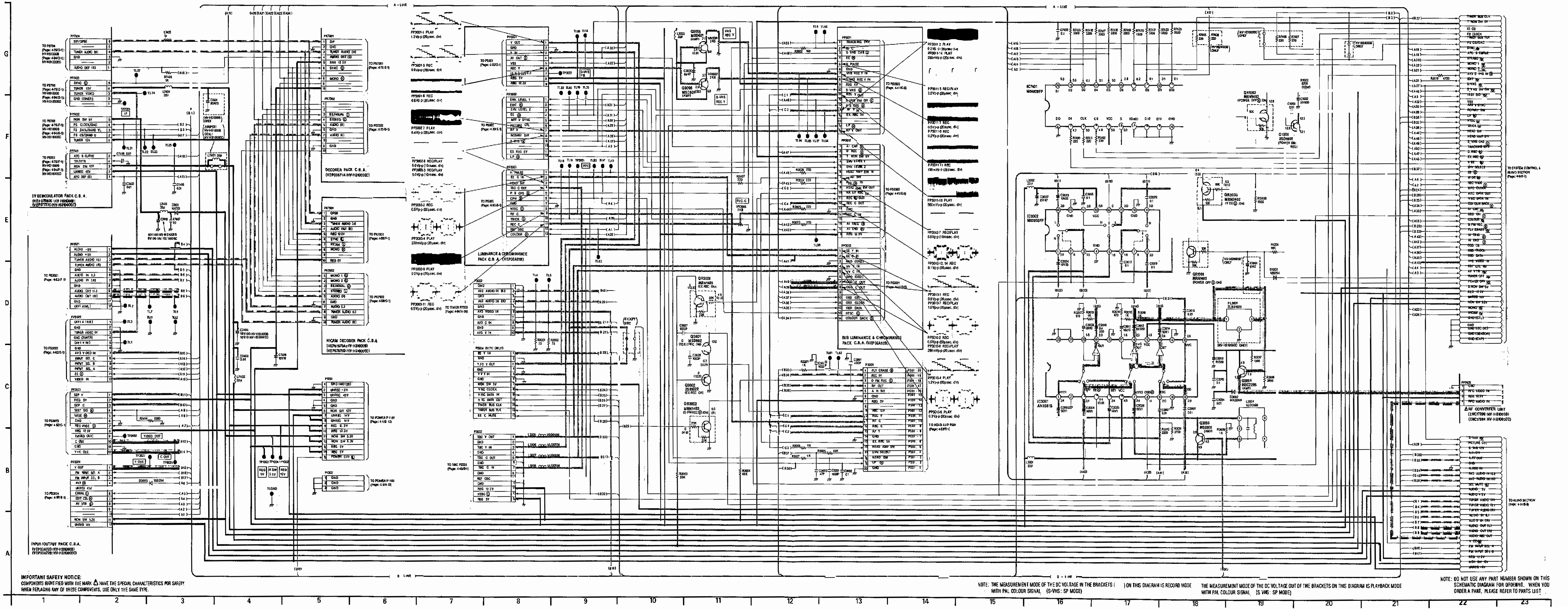
NOTE: THE MEASUREMENT MODE OF THE DC VOLTAGE IN THE BRACKETS ( ) ON THIS DIAGRAM IS RECORD MODE WITH PAL COLOUR SIGNAL. (S-VHS: SP MODE)

THE MEASUREMENT MODE OF THE DC VOLTAGE OUT OF THE BRACKETS ON THIS DIAGRAM IS PLAYBACK MODE WITH PAL COLOUR SIGNAL. (S-VHS: SP MODE)

• LINE IN SIGNAL LEVEL...−10dB 1 kHz

NOTE: DO NOT USE ANY PART NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR ORDERING. WHEN YOU ORDER A PART. PLEASE REFER TO PARTS LIST

4-5. LUMINANCE & CHROMINANCE SECTION IN MAIN SCHEMATIC DIAGRAM



VIDEO MAIN SIGNAL PATH IN REC MODE
VIDEO MAIN SIGNAL PATH IN PLAYBACK MODE
AUDIO MAIN SIGNAL PATH IN REC MODE
AUDIO MAIN SIGNAL PATH IN PLAYBACK MODE
A - LINE
B - LINE
TV DEMODULATOR PACK C.B.A.
DECODER PACK C.B.A.
NICAM DECODER PACK C.B.A.
LUMINANCE & CHROMINANCE PACK C.B.A. (VEP02A81B)
SUB LUMINANCE & CHROMINANCE PACK C.B.A.
INPUT/OUTPUT PACK C.B.A.
RF CONVERTER UNIT
TO SYSTEM CONTROL & SERVO SECTION
TO AUDIO SECTION
G
F
E
D
C
B
A
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23

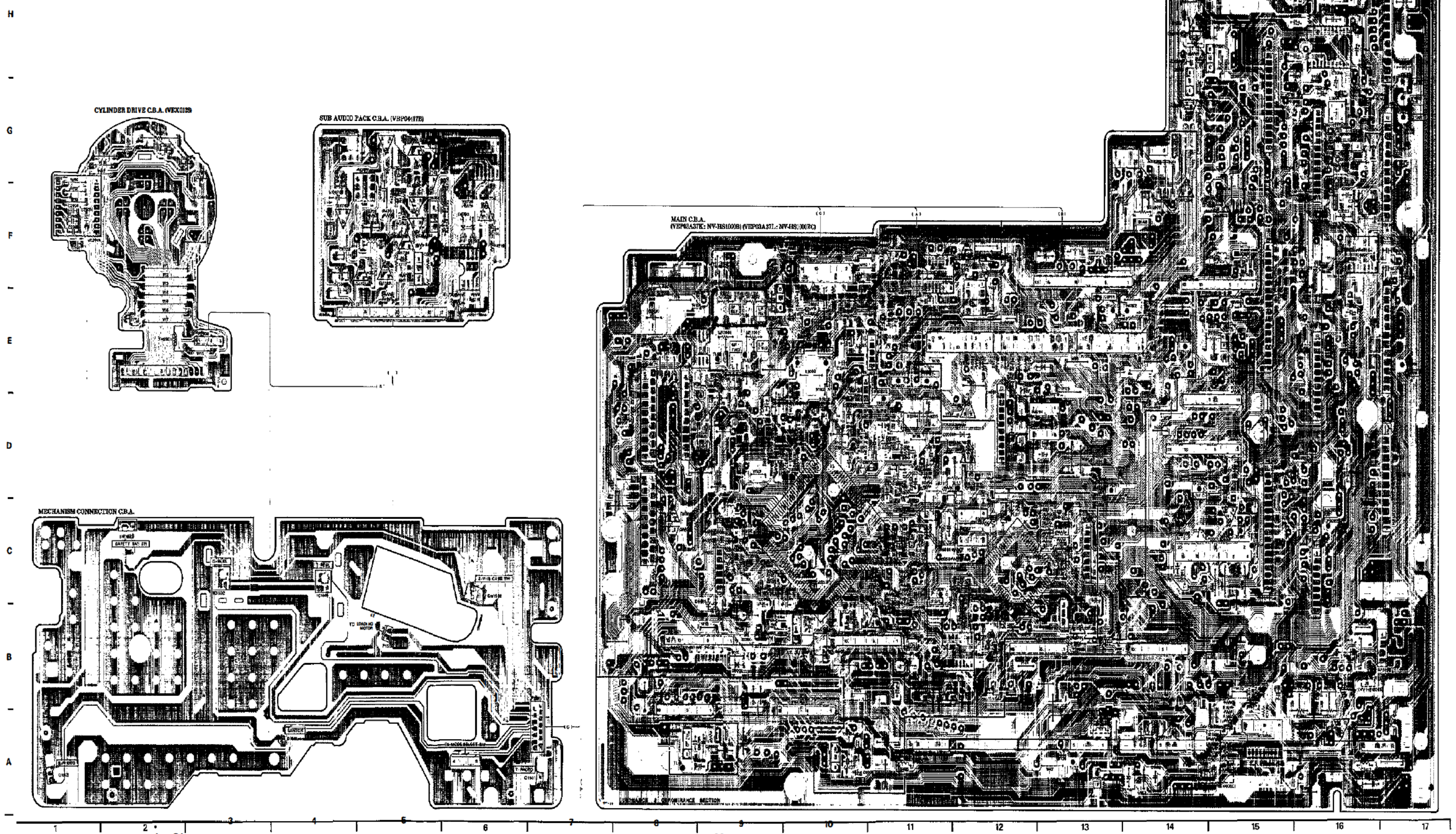
IMPORTANT SAFETY NOTICE:
COMPONENTS IDENTIFIED WITH THE MARK △ HAVE THE SPECIAL CHARACTERISTICS FOR SAFETY.
WHEN REPLACING ANY OF THESE COMPONENTS, USE ONLY THE SAME TYPE.

NOTE: THE MEASUREMENT MODE OF THE DC VOLTAGE IN THE BRACKETS ( ) ON THIS DIAGRAM IS RECORD MODE WITH PAL COLOUR SIGNAL (S-VHS: SP MODE)

THE MEASUREMENT MODE OF THE DC VOLTAGE OUT OF THE BRACKETS ON THIS DIAGRAM IS PLAYBACK MODE WITH PAL COLOUR SIGNAL (S-VHS: SP MODE)

NOTE: DO NOT USE ANY PART NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR ORDERING. WHEN YOU ORDER A PART, PLEASE REFER TO PARTS LIST.

4-6. MAIN C.B.A. (VEP03A37K: NV-HS1000B) (VEP03A37L: NV-HS1000EC)


H
G
F
E
D
C
B
A
CYLINDER DRIVE C.B.A. (VEX0129)
SUB AUDIO PACK C.B.A. (VEP04417B)
MAIN C.B.A.
(VEP03A37K: NV-HS1000B) (VEP03A37L: NV-HS1000EC)
(C)
(A)
(B)
MECHANISM CONNECTION C.B.A.
SAFETY TAB SW
S-VHS CASE SW
LUMINANCE & CHROMINANCE SECTION
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17

MAIN C.B.A. ADDRESS INFORMATION

SYSTEM CONTROL & SERVO Section

Transistor	
Q1501	A-7
Q1502	A-1
Q2001	D-12
Q2002	F-12
Q6001	E-9
Q6002	E-10
Q6003	A-10
Q6004	F-11
Q6005	B-11
Q6006	B-12
Q6008	A-8

Transistor & Resistor	
QR2001	D-11
QR2002	E-9
QR6001	E-8
QR6002	C-8
QR6003	C-8
QR6004	B-11
QR6009	B-10
QR6012	B-11
QR6013	F-9
QR6014	B-13
QR6015	F-12

Integrated Circuit	
IC1501	C-4
IC1502	C-3
IC2001	E-9
IC2002	F-11
IC2901	F-1
IC6001	C-10
IC6002	C-12
IC6003	B-10
IC6005	B-12
IC6007	C-12
IC6008	E-10

Test Point	
TP2001	C-11
TP2002	D-11
TP2031	E-11
TP2032	E-11
TP6010	E-10
TP6011	E-10

Adjustment	
VR2001	D-12
VR2002	E-9
VR2003	E-9
VR2004	E-9
VR2005	E-9

Connector	
P1503	B-5
P1504	A-6
P1505	B-7
P2001	E-11
P2901	E-2
P2902	E-3
P6001	F-10
P6003	C-9
P6004	C-13
P7401	E-8
P7402	D-8
PP2001	B-8
PP2002	B-11
PP7406	E-8

ADDRESS INFORMATION

LUMINANCE & CHROMINANCE Section

Transistor	
Q1001	H-15
Q3001	G-14
Q3002	H-14
Q3003	G-15
Q3004	G-16
Q3005	B-16
Q3006	A-16

Transistor & Resistor	
QR1001	H-14
QR1002	H-14
QR3001	G-15
QR3002	C-15
QR3003	F-15

Integrated Circuit	
IC3001	H-16
IC3002	F-16
IC7401	A-15

Test Point	
TP1001	E-17
TP1002	H-15
TP1003	H-15
TP3001	D-14
TP3002	G-17
TP3021	G-17
TP3022	C 16
TP8021	G-17

Adjustment	
VR3001	B-16
VR3002	B-16
VR3003	E-15

Connector	
P1001	H-15
P1002	H-16
P3001	C-15
P3002	D 14
P3003	F-14
P3004	D 14
PK7301	B-10
PK7302	B-8
PK7901	B-14
PK7902	B-13
PP3001	C-16
PP3002	E-16
PP3003	G-16
PP3011	D-15
PP3012	F-15
PP3013	H-15
PP3021	D-17
PP3022	E-17
PP3023	F-17
PP3024	H-17
PP7401	A-16
PP7402	A-14
PP7403	A-13
PP7404	A-11
PP7405	B-17

ADDRESS INFORMATION

AUDIO Section & SUB AUDIO PACK C.B.A.

Transistor	
Q4701	F-5
Q4702	G-5
Q4703	F-5
Q4704	F-5
Q4705	G-5
Q4706	F-5
Q4707	F-4
Q4708	F-5

Transistor & Resistor	
QR4001	D-12
QR4002	E-14
QR4003	D-14
QR4004	F-14
QR4005	B-10
QR4701	F-5
QR4702	F-5
QR4703	G-5
QR4704	F-6

Integrated Circuit	
IC4001	D-13
IC4701	F-6
IC4702	G-6

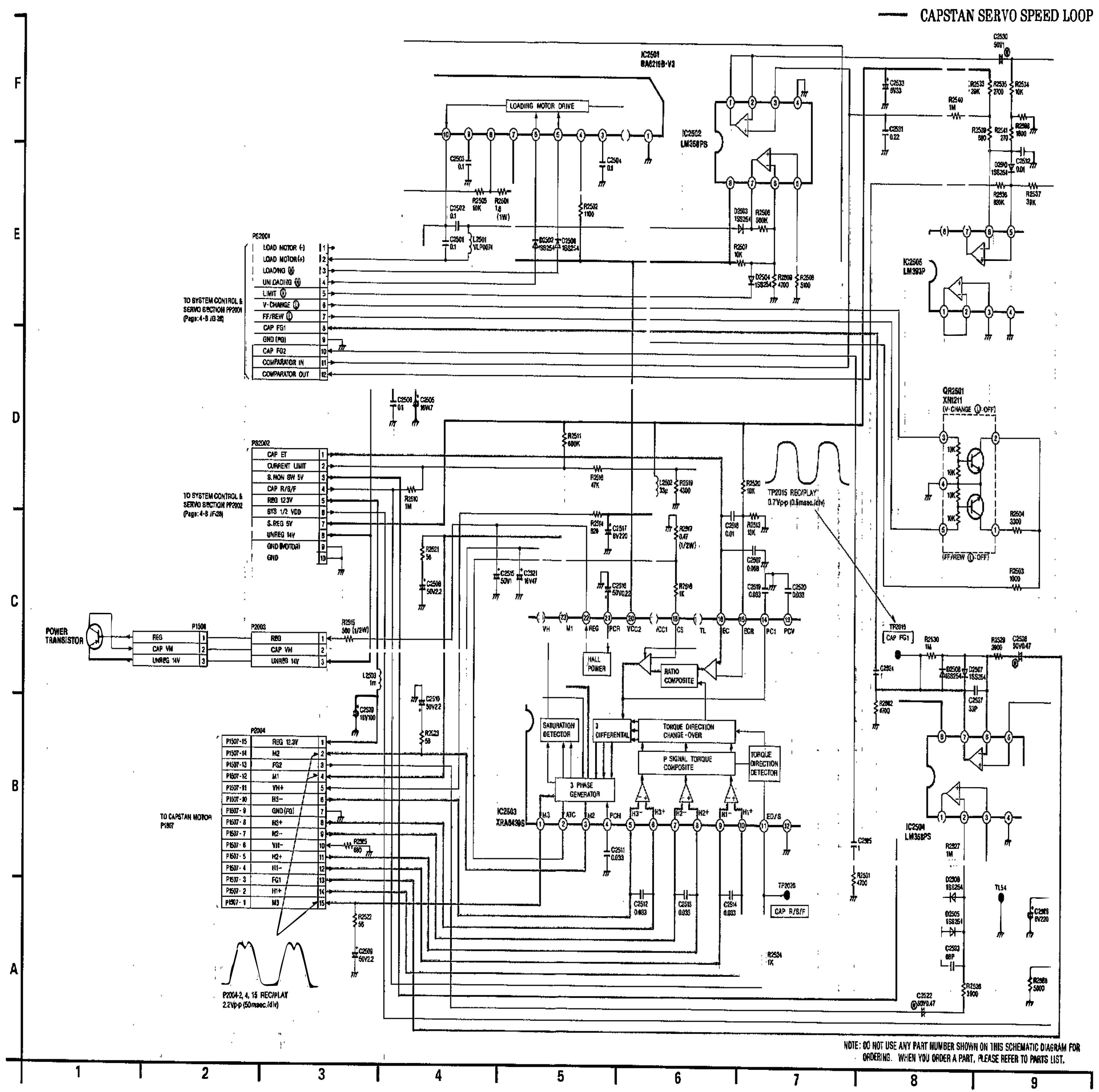
Adjustment	
VR4002	F-14

Test Point	
TP4002	E-14
TP4003	E-13
TP4004	E-14
TP4501	E-11
TP4511	D-13

Connector	
P4001	G-14
P4002	D-12
P4003	G-14
PP4001	E-13
PP4002	E-12
PP4003	E-11
PP4501	F-13
PS4701	E-4

ADDRESS INFORMATION

4-7. CAPSTAN DRIVE PACK SCHEMATIC DIAGRAM


CAPSTAN SERVO SPEED LOOP
IC2501
BA6218B-V3
LOADING MOTOR DRIVE
IC2502
LM358PS
IC2505
LM393P
QR2501
XN1211
IC2504
LM358PS
IC2503
XRA6430S
PS2001
LOAD MOTOR (-)
LOAD MOTOR (+)
LOADING
UNLOADING
LIMIT
V-CHANGE
FF/REW
CAP FG1
GND (FG)
CAP FG2
COMPARATOR IN
COMPARATOR OUT
TO SYSTEM CONTROL & SERVO SECTION PP2001 (Page: 4-8 JG-26)
PS2002
CAP ET
CURRENT LIMIT
S.NON SW 5V
CAP R/S/F
REG 12.3V
SYS 1/2 VDD
S.REG 5V
UNREG 14V
GND (MOTOR)
GND
TO SYSTEM CONTROL & SERVO SECTION PP2002 (Page: 4-8 JF-28)
POWER TRANSISTOR
P1506
P2003
REG
CAP VM
UNREG 14V
P2004
REG 12.3V
M2
FG2
M1
VH+
H3−
GND (FG)
H3+
H2−
VH−
H2+
H1−
FG1
H1+
M3
TO CAPSTAN MOTOR P1507
P2004-2, 4, 15 REC/PLAY
2.2Vp-p (50msec./div)
TP2015 REC/PLAY
0.7Vp-p (0.5msec./div)
TP2015
CAP FG1
TP2026
CAP R/S/F
HALL POWER
RATIO COMPOSITE
SATURATION DETECTOR
3 DIFFERENTIAL
TORQUE DIRECTION CHANGE-OVER
P SIGNAL TORQUE COMPOSITE
TORQUE DIRECTION DETECTOR
3 PHASE GENERATOR
V-CHANGE
OFF
FF/REW
A
B
C
D
E
F
1
2
3
4
5
6
7
8
9

NOTE: DO NOT USE ANY PART NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR ORDERING. WHEN YOU ORDER A PART, PLEASE REFER TO PARTS LIST.

CAPSTAN DRIVE PACK ICs DC VOLTAGE CHART (S-VHS: SP MODE)

REF. NO.	IC2501										IC2502									
MODE	1	2	3	4	5	6	7	8	9	10	1	2	3	4	5	6	7	8		
STOP	0	0	0	6.9	0	0	14.4	14.4	0	0	0	0	0	0	4.9	0.7	13.1	14.4		
PLAY	0	0.4	0	6.8	0	0	14.3	14.3	0	0	0	0	0	0	4.8	0.7	13.0	14.3		
REC	0	0.3	0.1	6.8	0	0	14.3	14.3	0	0.1	0	0	0	0	4.8	0.7	13.0	14.3		
F.F	0.1	0	0	14.2	0.1	0.1	14.3	14.3	0	0	0	0	0	0	4.8	0.7	13.7	14.3		
REW	0	0.2	0	14.2	0	0	14.3	14.3	0.1	0	0	0	0	0	4.8	0.7	13.7	14.3		

REF. NO.	IC2503																			
MODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
STOP	1.1	0	1.1	1.5	2.3	2.4	2.3	2.4	2.4	2.3	2.0	0	1.2	2.6	2.9	1.4	0	0	5.2	14.4
PLAY	3.1	0.1	3.1	1.5	2.4	2.4	2.4	2.4	2.4	2.4	0	0	0.8	0.7	2.9	2.6	0.5	0.1	5.2	14.3
REC	3.1	0.1	3.1	1.5	2.4	2.4	2.4	2.4	2.4	2.4	0	0	0.8	0.7	2.9	2.6	0.5	0.1	5.2	14.3
F.F	7.7	0.2	7.7	1.5	2.4	2.4	0	2.4	2.4	2.4	0	0.1	1.0	0.8	2.9	1.9	0.5	0	5.2	14.3
REW	7.3	0.2	7.3	1.5	2.4	2.4	2.4	2.4	2.4	2.4	5.0	0.1	0.9	0.7	2.9	2.5	0.5	0.2	5.2	14.2

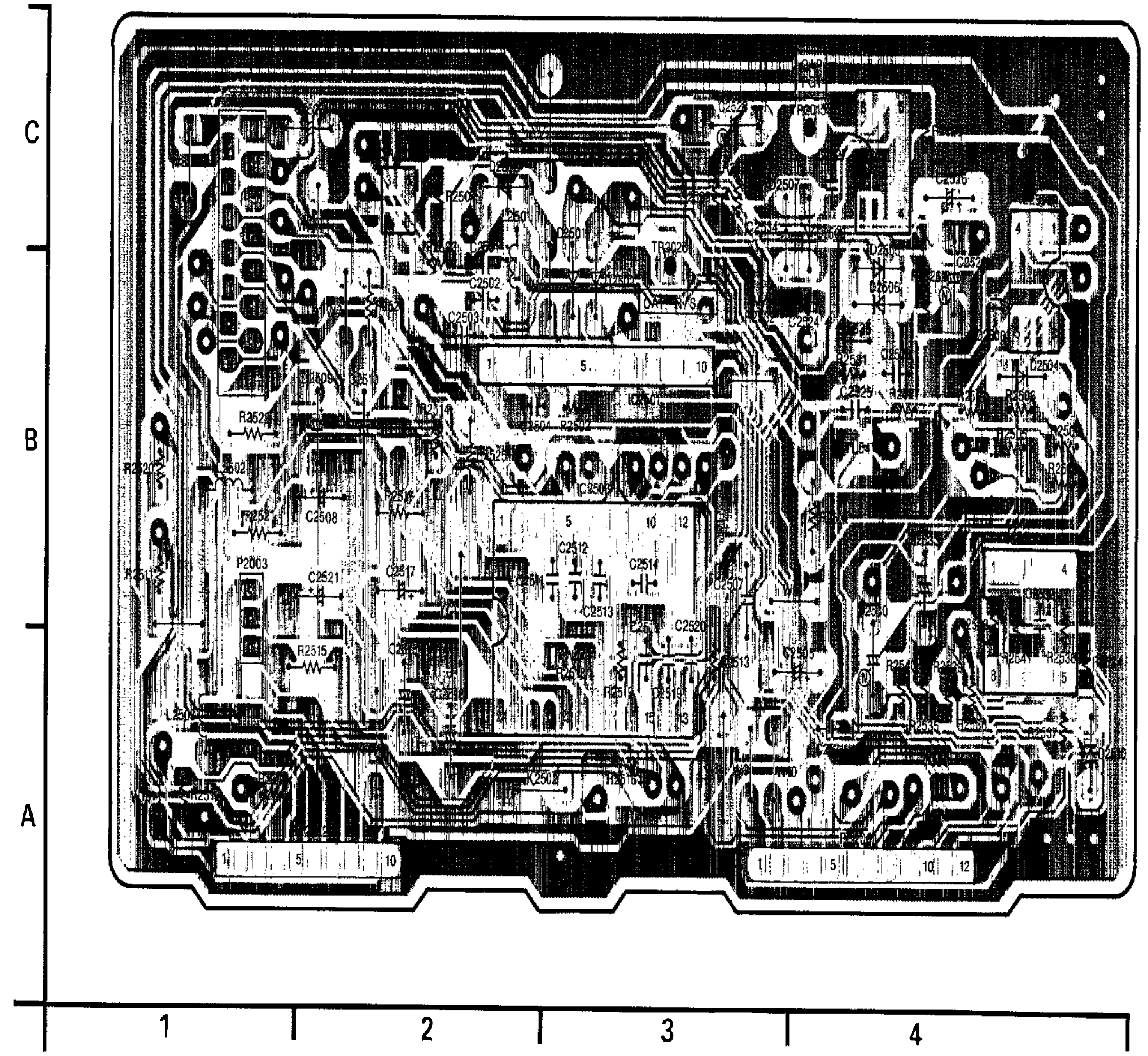
REF. NO.	IC2503			
MODE	21	22	23	24
STOP	0.5	13.8	1.1	4.7
PLAY	2.3	13.1	3.1	4.7
REC	2.3	13.1	3.1	4.6
F.F	12.1	5.8	7.3	14.2
REW	8.0	6.5	7.1	14.2

REF. NO.	IC2504								IC2505							
MODE	1	2	3	4	5	6	7	8	1	2	3	4	5	6	7	8
STOP	2.5	2.5	2.5	0	2.5	2.5	2.5	5.0	0	0.5	0.5	0	2.4	2.9	0	5.2
PLAY	2.5	2.5	2.5	0	2.5	2.5	2.5	5.0	0	0.4	0.4	0	2.4	2.9	0	5.2
REC	2.5	2.5	2.5	0	2.5	2.5	2.5	5.0	0	0.4	0.4	0	2.4	2.9	0	5.2
F.F	2.5	2.5	2.5	0	2.5	2.5	2.5	5.0	0	0.4	0.4	0	2.4	2.9	0	5.2
REW	2.5	2.5	2.5	0	2.5	2.5	2.5	5.0	0	0.4	0.4	0	2.4	2.9	0	5.2

CAPSTAN DRIVE PACK TRANSISTORs DC VOLTAGE CHART (S-VHS: SP MODE)

REF. NO.	QR2501				
MODE	1	2	3	4	5
STOP	0	0.1	4.9	0	4.9
PLAY	0	0.1	4.9	0	4.9
REC	0	0.1	4.9	0	4.9
F.F	14.2	14.2	0	0	0
REW	14.2	14.2	0	0	0

4-8. CAPSTAN DRIVE PACK C.B.A. (VEP02412B)


C
B
A
1
2
3
4
R2520
R2521
R2515
R2516
C2508
C2521
C2512
C2513
C2514
C2517
C2525
C2526
C2527
C2528
P2003
D2504
D2505
D2506
TR2502
5
10
12

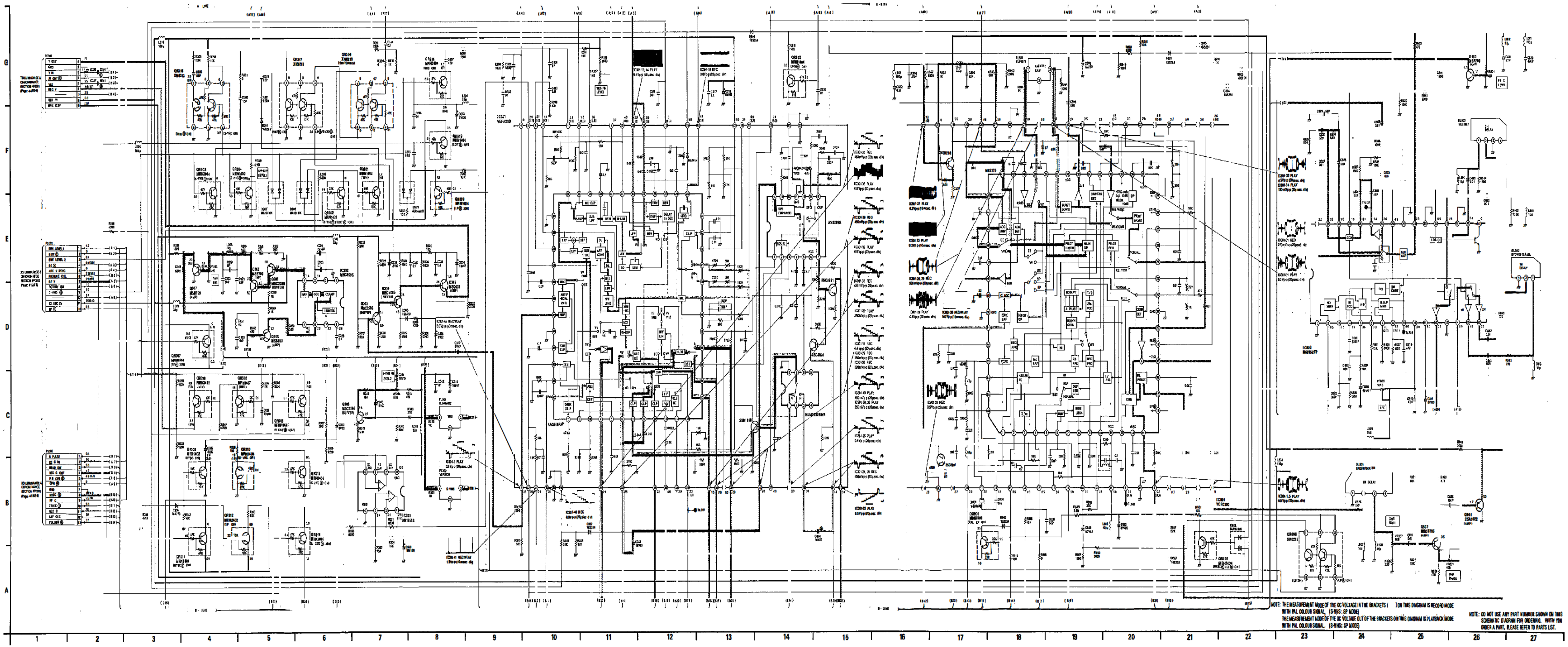
CAPSTAN DRIVE PACK C.B.A.	
Transistor & Resistor	
QR2501	C-2
Integrated Circuit	
IC2501	B-3
IC2502	C-4
IC2503	B-3
IC2504	C-4
IC2505	B-4
Test Point	
TP2015	C-4
TP2026	B-3
Connector	
P2003	B-1
P2004	C-1
PS2001	A-4
PS2202	A-2

ADDRESS INFORMATION

4-9. LUMINANCE & CHROMINANCE PACK SCHEMATIC DIAGRAM

MAIN SIGNAL PATH IN REC MODE

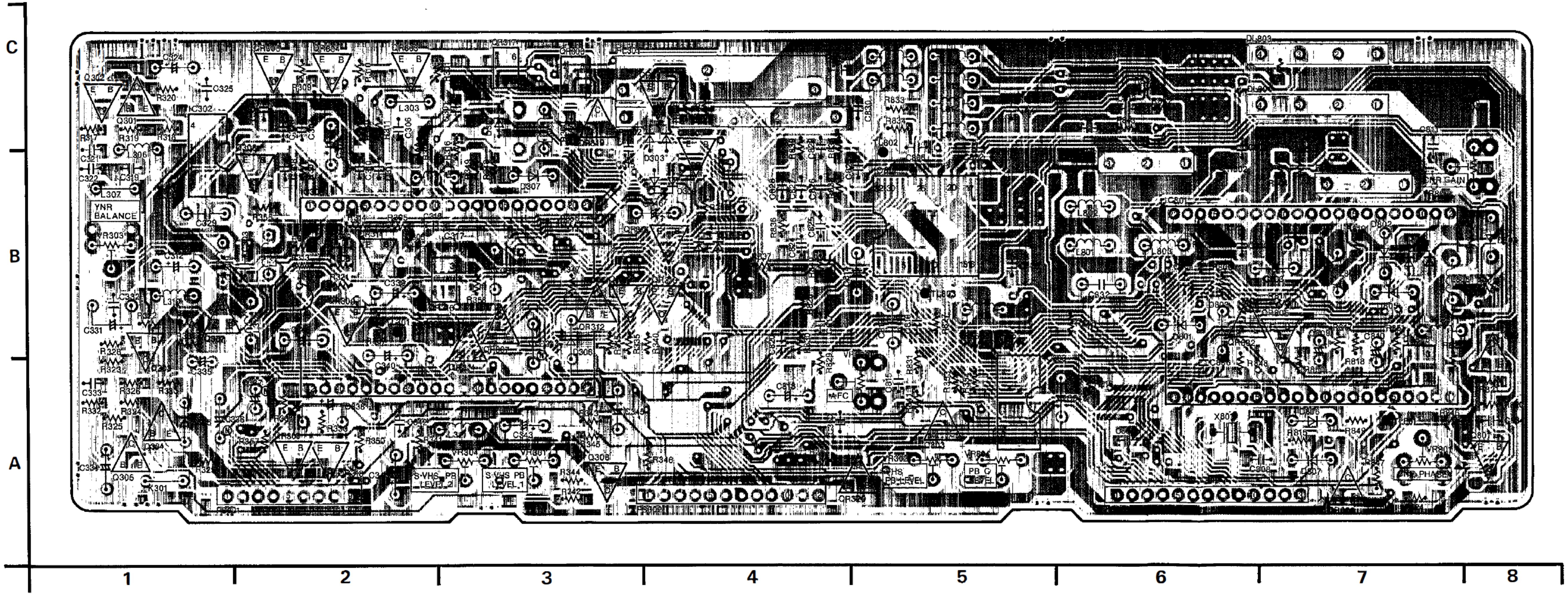
MAIN SIGNAL PATH IN PLAYBACK MODE


G
F
E
D
C
B
A
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27

NOTE: THE MEASUREMENT MODE OF THE DC VOLTAGE IN THE BRACKETS (   ) ON THIS DIAGRAM IS RECORD MODE WITH PAL COLOUR SIGNAL. (S-VHS: SP MODE)
THE MEASUREMENT MODE OF THE DC VOLTAGE OUT OF THE BRACKETS ON THIS DIAGRAM IS PLAYBACK MODE WITH PAL COLOUR SIGNAL. (S-VHS: SP MODE)

NOTE: DO NOT USE ANY PART NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR ORDERING. WHEN YOU ORDER A PART, PLEASE REFER TO PARTS LIST.

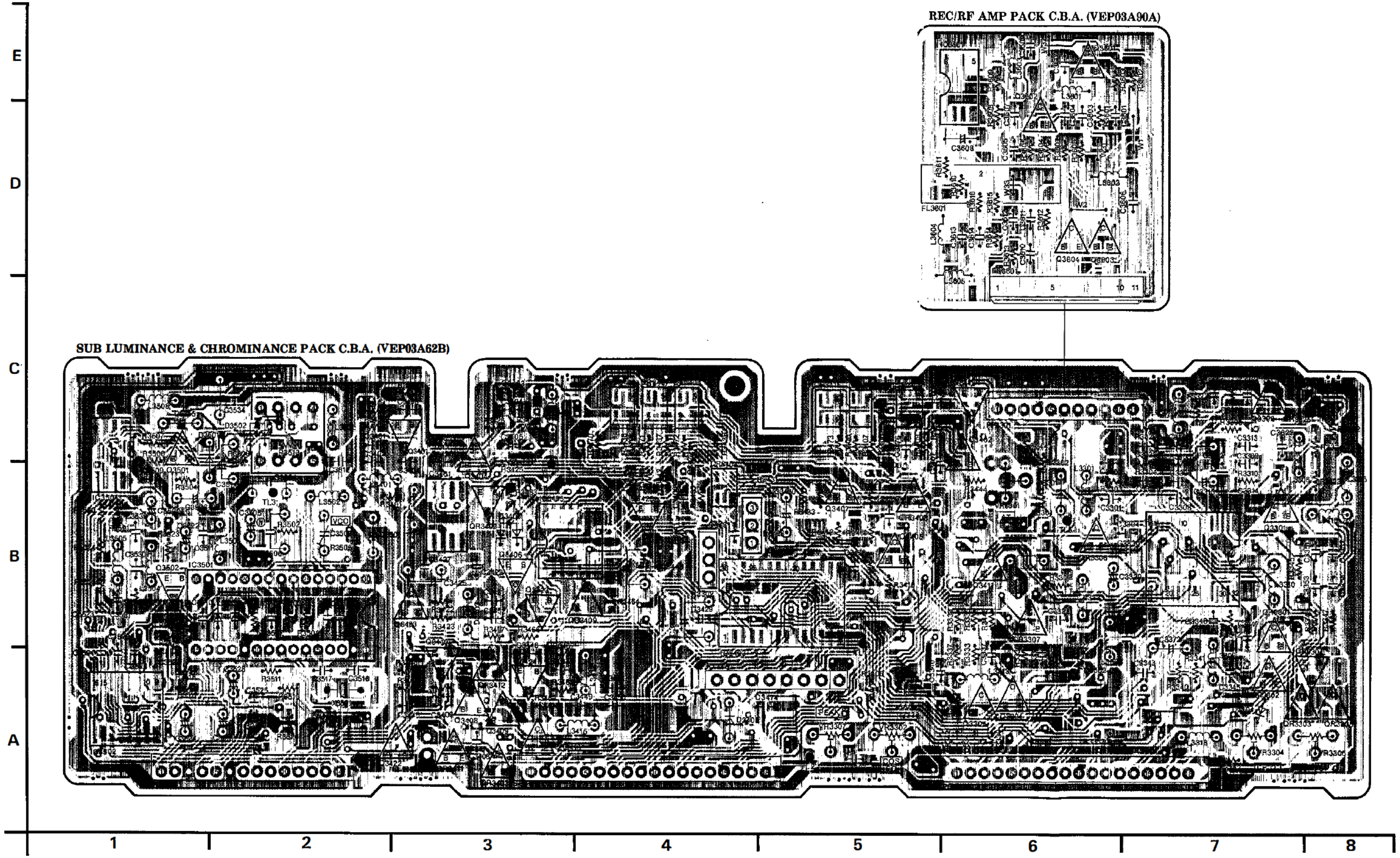
4-10. LUMINANCE & CHROMINANCE PACK C.B.A. (VEP03A61B)


C
B
A
1
2
3
4
5
6
7
8
YNR BALANCE
S-VHS PB LEVEL 2
S-VHS PB LEVEL 1
AFC
HS PB LEVEL
PB C LEVEL
YNR GAIN

LUMINANCE & CHROMINANCE PACK C.B.A.	
Transistor	
Q301	C-1
Q302	C-1
Q303	A-1
Q304	A-1
Q305	A-1
Q306	A-3
Q307	B-1
Q308	B-2
Q801	A-8
Q802	B-8
Q803	A-5
Transistor & Resistor	
QR301	C-4
QR302	C-4
QR303	C-2
QR304	C-2
QR305	C-2
QR306	C-3
QR307	B-3
QR308	A-2
QR309	B-2
QR310	B-3
QR311	B-2
QR312	B-3
QR313	B-4
QR314	B-3
QR315	B-4
QR316	B-3
QR317	C-3
QR318	A-2
QR319	C-3
QR320	A-5
QR802	B-6
QR803	A-7
QR805	B-7
QR806	B-7
Integrated Circuit	
IC301	B-2
IC302	C-1
IC303	A-5
IC801	B-6
IC802	B-5
Adjustment	
VR301	A-3
VR302	A-5
VR303	B-1
VR304	A-3
VR801	A-7
VR802	B-7
VR803	A-5
VR804	A-5
Connector	
PS301	A-2
PS302	A-4
PS303	A-6

ADDRESS INFORMATION

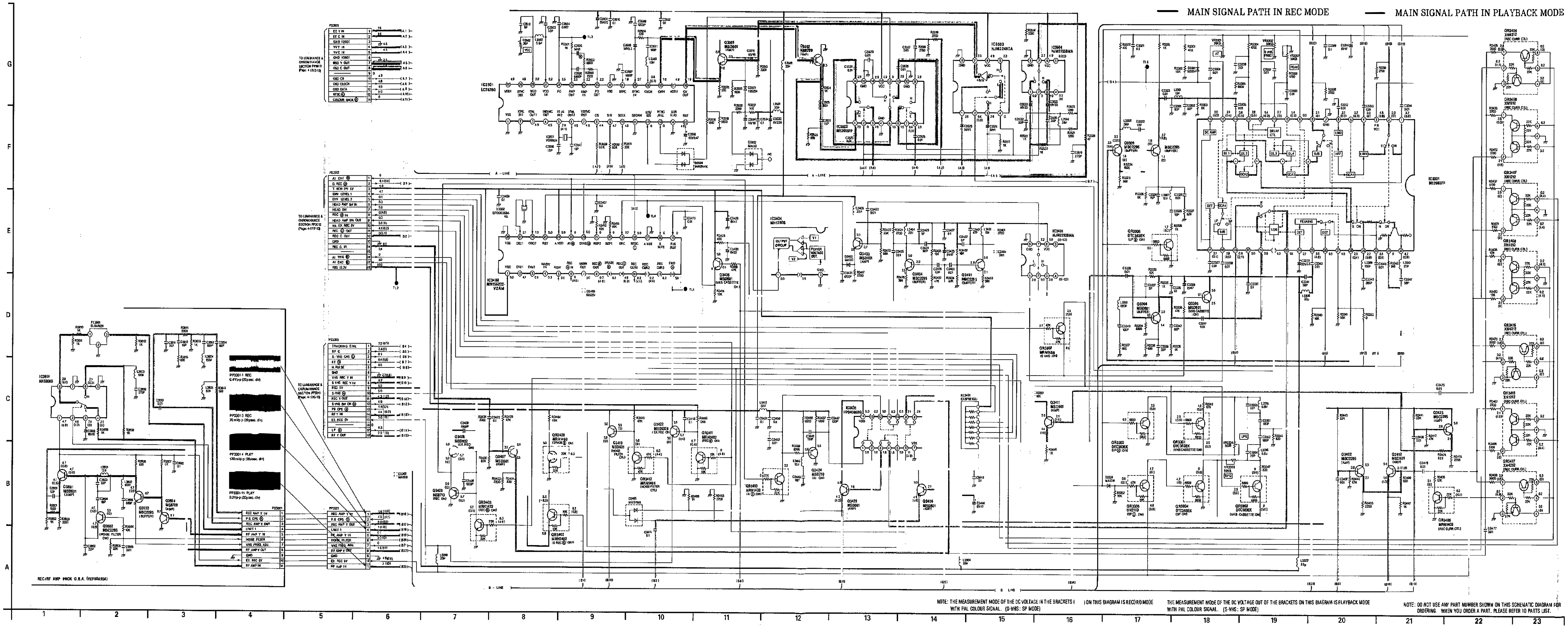
4-11. SUB LUMINANCE & CHROMINANCE PACK C.B.A. (VEP03A62B)


REC/RF AMP PACK C.B.A. (VEP03A90A)
SUB LUMINANCE & CHROMINANCE PACK C.B.A. (VEP03A62B)
E
D
C
B
A
1
2
3
4
5
6
7
8

SUB LUMINANCE & CHROMINANCE PACK C.B.A.	
Transistor	
Q3301	B-7
Q3302	C-7
Q3304	A-6
Q3306	A-6
Q3401	C-3
Q3402	C-6
Q3403	B-3
Q3404	B-3
Q3405	B-5
Q3406	B-3
Q3407	B-5
Q3408	A-3
Q3409	A-3
Q3410	A-3
Q3411	B-6
Q3412	C-6
Q3422	A-3
Q3423	B-3
Q3424	A-3
Q3425	B-4
Q3501	C-1
Q3502	B-1
Q3601	E-6
Q3602	D-6
Q3603	D-6
Q3604	D-6
Transistor & Resistor	
QR3301	B-7
QR3302	A-7
QR3303	A-7
QR3304	A-8
QR3305	A-8
QR3306	B-6
QR3307	B-6
QR3402	B-3
QR3403	A-3
QR3404	B-4
QR3405	B-5
QR3406	C-4
QR3407	C-4
QR3408	C-4
QR3409	B-4
QR3410	A-3
QR3411	A-3
QR3412	A-3
QR3415	C-5
QR3416	C-5
QR3417	C-5
Integrated Circuit	
IC3301	B-7
IC3401	B-3
IC3403	B-4
IC3404	B-4
IC3405	B-3
IC3501	B-2
IC3502	A-1
IC3503	C-2
IC3504	B-1
IC3601	E-6
Adjustment	
C3502	B-2
VR3301	B-6
VR3302	A-5
VR3304	A-7
VR3306	A-6
VR3307	A-5
Connector	
PP3301	C-6
PS3302	A-3
PS3303	A-6
PS3501	A-1
PS3601	C-6

ADDRESS INFORMATION

4-12. SUB LUMINANCE & CHROMINANCE PACK SCHEMATIC DIAGRAM

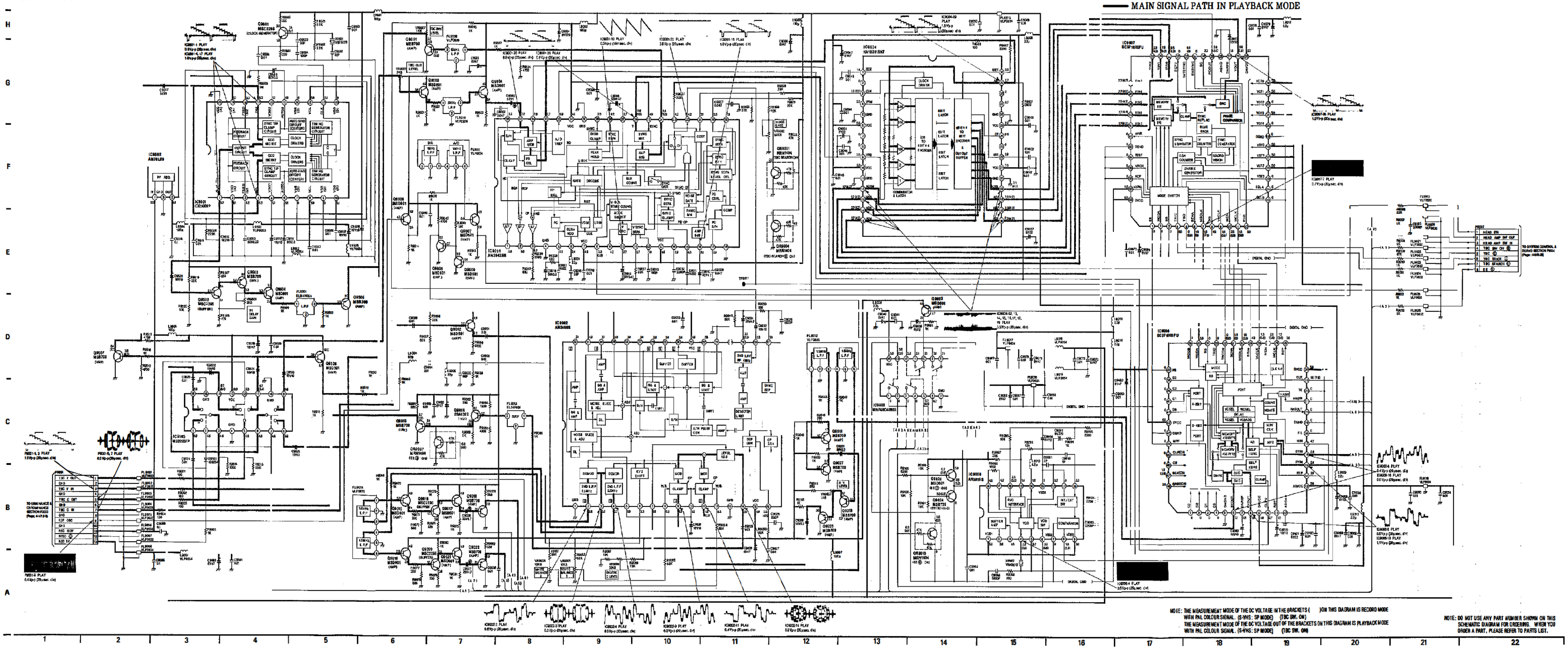

MAIN SIGNAL PATH IN REC MODE
MAIN SIGNAL PATH IN PLAYBACK MODE
PS3501
EE Y IN
EE C IN
GND (OSD)
VVY IN
VVC IN
GND (OSD)
OSD Y OUT
OSD C OUT
OSD CS
OSD CLOCK
OSD DATA
NTSC Ⓗ
COLOUR BACK Ⓗ
TO LUMINANCE & CHROMINANCE SECTION PP3013 (Page: 4-17/D-13)
IC3501 LC74780
TL3
PS3302
AI CNT Ⓗ
D. REC Ⓗ
T. NON SW 5V
ENV LEVEL 1
ENV LEVEL 2
HEAD AMP SW IN
HEAD SW
REC Ⓗ IN
HEAD AMP SW OUT
HA. EX. REC 5V
REC Ⓛ OUT
REC C OUT
GND
REC C IN
AI TRIG Ⓗ
AI END Ⓗ
REG 12.3V
TO LUMINANCE & CHROMINANCE SECTION PP3012 (Page: 4-17/F-13)
TL2
A – LINE
X3302 EFOQC3584-A5
IC3402 MN155202-V2AM
PS3303
TRACKING E7N
RF C
S-VHS CAS Ⓛ
EE Ⓗ
H. PULSE
GND
VHS REC Y IN
S-VHS REC Y IN
REG 5V
S-VHS Ⓗ
REC Y OUT
S-VHS SW ON Ⓗ
PB CPS Ⓗ
RF Y IN
EX. REC 5V
LP Ⓗ
RF Y OUT
TO LUMINANCE & CHROMINANCE SECTION PP3013 (Page: 4-17/G-13)
IC3604 AN3308S
PP3301-1 REC 0.4Vp-p (20μsec. div)
PP3301-3 REC 70mVp-p (20μsec. div)
PP3301-4 PLAY 120mVp-p (20μsec. div)
PP3301-11 PLAY 0.3Vp-p (20μsec. div)
PS3601
PP3301
REC AMP Y IN
P.B CPS Ⓗ
REC AMP Y OUT
LIMIT 1
RF AMP Y IN
NOISE FILTER
VHS FREQ. ADJ.
RF AMP Y OUT
GND
EX. REC 5V
RF AMP IN
REC/RF AMP PACK C.B.A. (VEP09A90A)
Q3409 MSB710 (REC ON)
IC3404 MN1280S
IC3406 MN3868
IC3503 NJM2248CA
IC3504 NJM2283BMA
IC3401 NJM2283BMA
IC3301 M52061FP
B – LINE
G
F
E
D
C
B
A
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23

NOTE: THE MEASUREMENT MODE OF THE DC VOLTAGE IN THE BRACKETS ( ) ON THIS DIAGRAM IS RECORD MODE WITH PAL COLOUR SIGNAL. (S-VHS: SP MODE)

THE MEASUREMENT MODE OF THE DC VOLTAGE OUT OF THE BRACKETS ON THIS DIAGRAM IS PLAYBACK MODE WITH PAL COLOUR SIGNAL. (S-VHS: SP MODE)

NOTE: DO NOT USE ANY PART NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR ORDERING. WHEN YOU ORDER A PART, PLEASE REFER TO PARTS LIST.

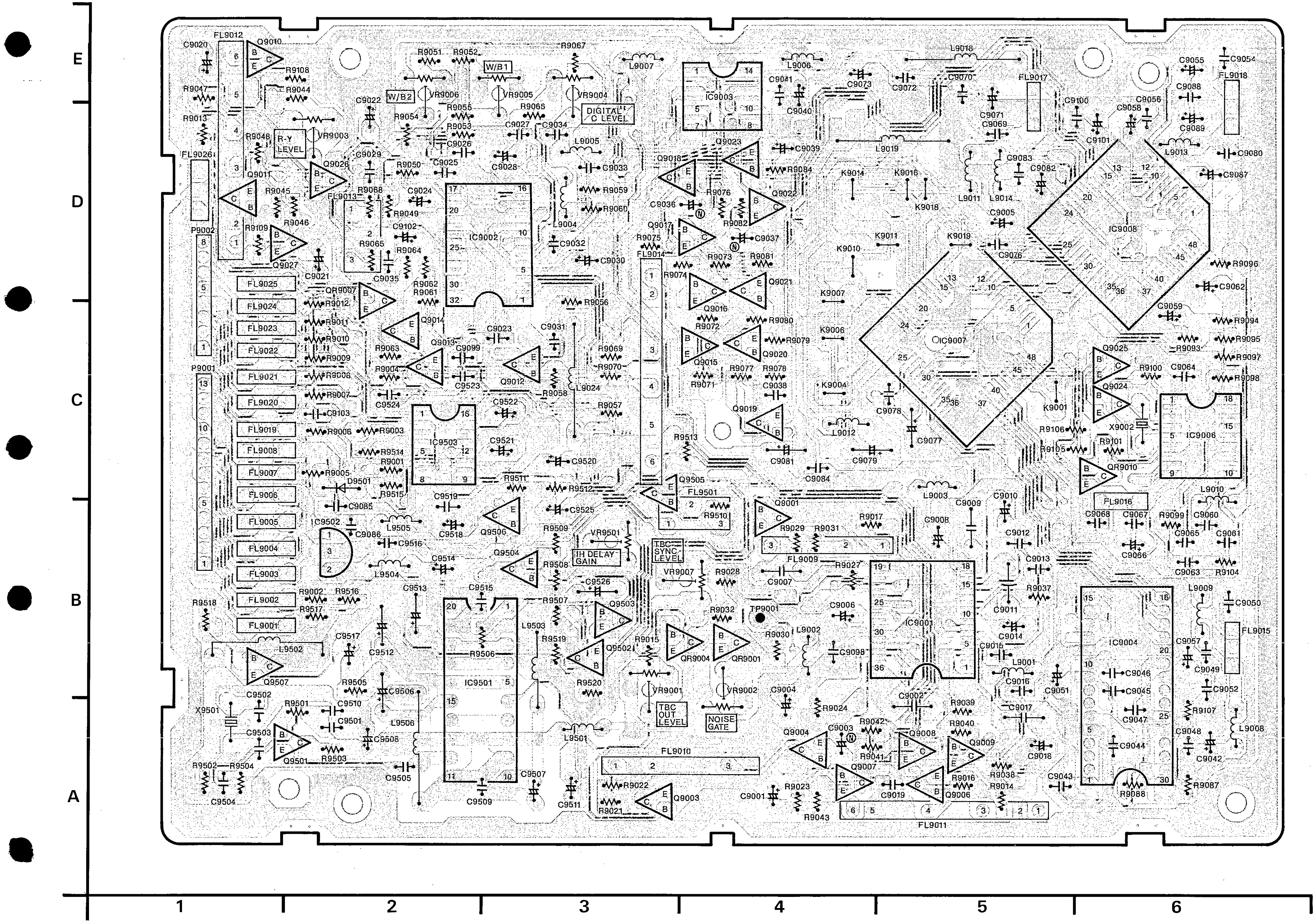
4-13. TBC SCHEMATIC DIAGRAM


MAIN SIGNAL PATH IN PLAYBACK MODE
H
G
F
E
D
C
B
A
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
P9001
1 TBC Y OUT
2 GND
3 TBC Y IN
4 GND
5 TBC C OUT
6 GND
7 TBC C IN
8 GND
9 REF OSC
10 GND
11 REG 12.3V
12 NTSC
13 REG 5V
TO LUMINANCE & CHROMINANCE SECTION P3003
P9001-1, 3 PLAY 1.2Vp-p (20μsec. div)
P9001-5, 7 PLAY 0.3 Vp-p (20μsec. div)
P9001-9 PLAY 0.4Vp-p (20μsec. div)
IC9503 M52055FP
FL9001 VLF0633
FL9002 VLF0633
FL9003 VLF0633
FL9004 VLF0633
FL9005 VLF0633
FL9006 VLF0634
FL9007 VLF0632
FL9008 VLF0634
P9002
1 HEAD SW
2 HEAD AMP SW OUT
3 HEAD AMP SW IN
4 TBC SW ON
5 TBC
6 TBC TRICK
7 TBC SEARCH
8 EE
TO SYSTEM CONTROL & SERVO SECTION P9004
DIGITAL GND

NOTE: THE MEASUREMENT MODE OF THE DC VOLTAGE IN THE BRACKETS (　　) ON THIS DIAGRAM IS RECORD MODE WITH PAL COLOUR SIGNAL. (S-VHS: SP MODE) (TBC SW. ON)
THE MEASUREMENT MODE OF THE DC VOLTAGE OUT OF THE BRACKETS ON THIS DIAGRAM IS PLAYBACK MODE WITH PAL COLOUR SIGNAL. (S-VHS: SP MODE) (TBC SW. ON)

NOTE: DO NOT USE ANY PART NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR ORDERING. WHEN YOU ORDER A PART, PLEASE REFER TO PARTS LIST.

4-14. TBC C.B.A. (VEP03A53A)


E
D
C
B
A
1
2
3
4
5
6
W/B1
W/B2
DIGITAL C LEVEL
R-Y LEVEL
1H DELAY GAIN
TBC SYNC LEVEL
TBC OUT LEVEL
NOISE GATE
IC9001
IC9002
IC9003
IC9004
IC9006
IC9007
IC9008
IC9501
IC9503
P9001
P9002
TP9001

TBC C.B.A.

Transistor

Q9001	B-4
Q9003	A-3
Q9004	A-4
Q9006	A-5
Q9007	A-4
Q9008	A-5
Q9009	A-5
Q9010	E-1
Q9011	D-1
Q9012	C-3
Q9013	C-2
Q9014	C-2
Q9015	C-4
Q9016	D-4
Q9017	D-4
Q9018	D-3
Q9019	C-4
Q9020	C-4
Q9021	D-4
Q9022	D-4
Q9023	D-4
Q9024	C-6
Q9025	C-6
Q9026	D-2
Q9027	D-2
Q9501	A-2
Q9502	B-3
Q9503	B-3
Q9504	B-3
Q9505	C-3
Q9506	B-3
Q9507	B-1

Transistor & Resistor

QR9001	B-4
QR9004	B-4
QR9007	D-2
QR9010	C-6

Integrated Circuit

IC9001	B-5
IC9002	D-3
IC9003	E-4
IC9004	B-6
IC9006	C-6
IC9007	C-5
IC9008	D-6
IC9501	B-2
IC9502	B-2
IC9503	C-2

Test Point

TP9001	B-4

Adjustment

VR9001	B-3
VR9002	B-4
VR9003	D-2
VR9004	E-3
VR9005	E-3
VR9006	E-2
VR9007	B-4
VR9501	B-3

Connector

P9001	C-1
P9002	D-1

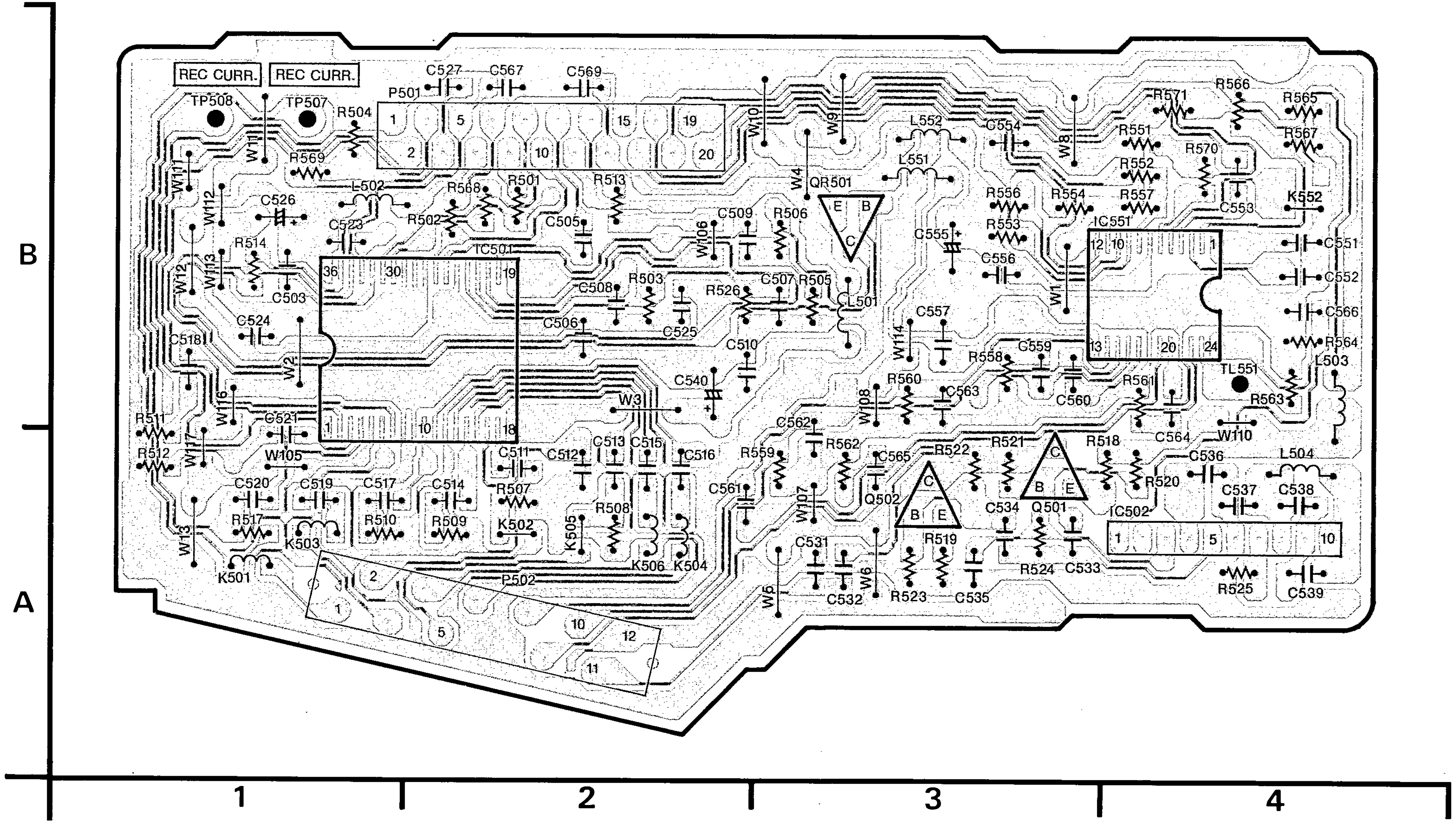
ADDRESS INFORMATION

4-15. HEAD AMP C.B.A. (VEP05176G)

HEAD AMP C.B.A.

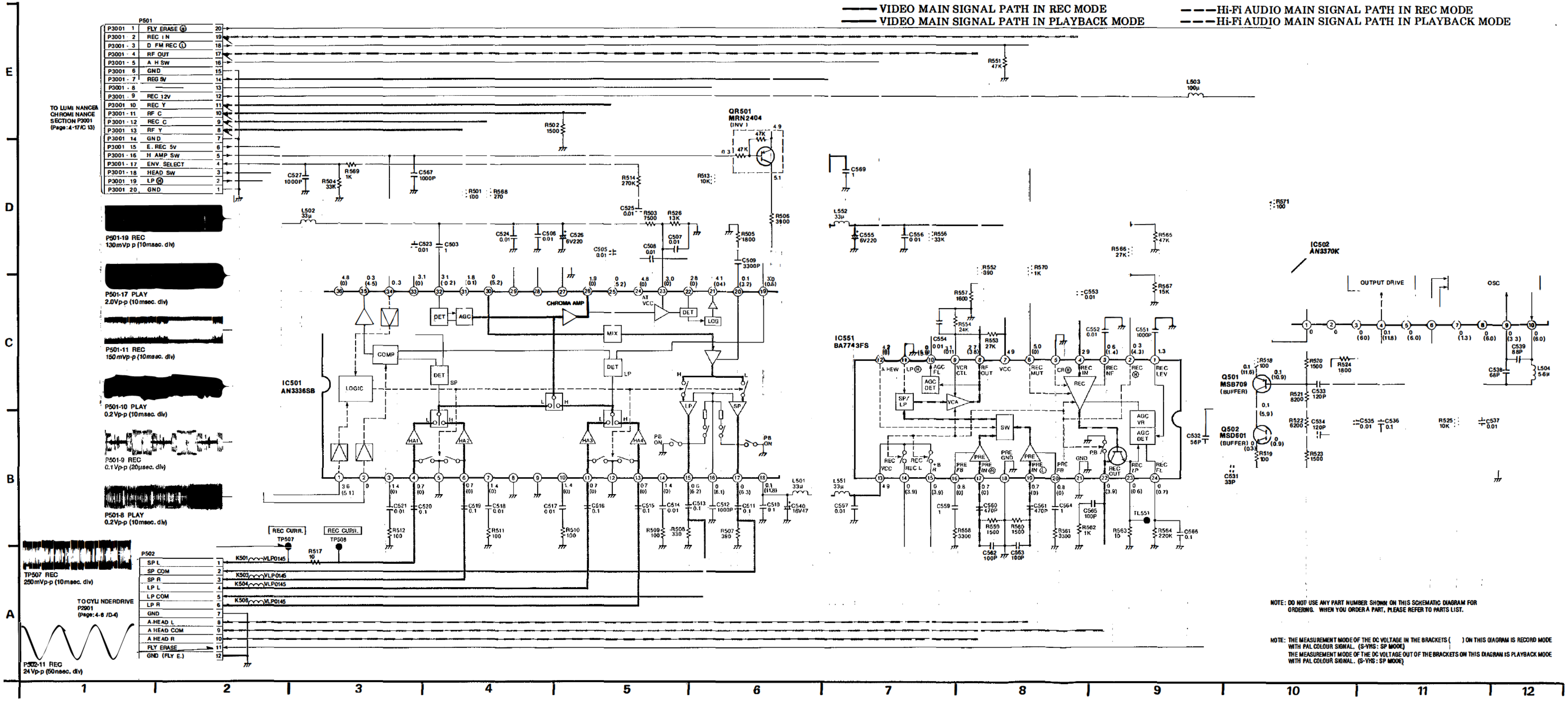
Transistor	
Q501	A-3
Q502	A-3
Transistor & Resistor	
QR501	B-3
Integrated Circuit	
IC501	B-1
IC502	A-4
IC551	B-4
Test Point	
TL551	B-4
TP507	B-1
TP508	B-1
Connector	
P501	B-2
P502	A-1

ADDRESS INFORMATION



B
A
1
2
3
4
REC CURR.
REC CURR.
TP508
TP507
R504
P501
C527
C567
C569
W11
W111
W112
R569
C526
L502
R568
R501
R513
R502
C523
R514
IC501
C505
W106
C509
R506
QR501
E
B
C
W4
W10
W9
L552
L551
C554
W8
R571
R566
R565
R567
R551
R552
R570
R556
R554
R557
R553
C553
K552
IC551
C555
C556
C551
C552
C566
R564
L503
W12
W113
C503
C524
C518
W2
C508
R503
R526
C507
R505
L501
C506
C525
C510
W114
C557
R558
C559
C560
W1
TL551
R563
W116
R511
R512
C521
W105
W3
C540
W108
R560
C563
R561
C564
W110
W117
C511
C512
C513
C515
C516
R559
C562
R562
C565
R522
R521
R518
C536
L504
R520
C537
C538
C520
C519
C517
C514
R507
C561
W107
Q502
Q501
C534
IC502
R517
R510
R509
K502
R508
K505
K506
K504
R519
W13
K503
K501
P502
C531
W6
W5
C532
R523
C535
R524
C533
R525
C539
1
2
5
10
11
12
15
19
20
18
24
30
36

4-16. HEAD AMP SCHEMATIC DIAGRAM


P501
P3001 1 FLY ERASE Ⓗ 20
P3001 2 REC IN 19
P3001 3 D FM REC Ⓛ 18
P3001 4 RF OUT 17
P3001 5 A H SW 16
P3001 6 GND 15
P3001 7 REG 5V 14
P3001 8 13
P3001 9 REC 12V 12
P3001 10 REC Y 11
P3001 11 RF C 10
P3001 12 REC C 9
P3001 13 RF Y 8
P3001 14 GND 7
P3001 15 E. REC 5V 6
P3001 16 H AMP SW 5
P3001 17 ENV. SELECT 4
P3001 18 HEAD SW 3
P3001 19 LP Ⓗ 2
P3001 20 GND 1
TO LUMINANCE& CHROMINANCE SECTION P3001 (Page:4-17/C 13)
P501-19 REC
130mVp-p (10msec. div)
P501-17 PLAY
2.0Vp-p (10msec. div)
P501-11 REC
150mVp-p (10msec. div)
P501-10 PLAY
0.2Vp-p (10msec. div)
P501-9 REC
0.1Vp-p (20μsec. div)
P501-8 PLAY
0.2Vp-p (10msec. div)
TP507 REC
250mVp-p (10msec. div)
P502-11 REC
24Vp-p (50nsec. div)
TO CYLINDERDRIVE P2901 (Page:4-6 /D-4)
P502
SP L 1
SP COM 2
SP R 3
LP L 4
LP COM 5
LP R 6
GND 7
A.HEAD L 8
A HEAD COM 9
A HEAD R 10
FLY ERASE 11
GND (FLY E.) 12
K501 VLP0145
K503 VLP0145
K504 VLP0145
K506 VLP0145
REC CURR. TP507
REC CURR. TP508
R517 10
IC501 AN3336SB
LOGIC
COMP
DET
AGC
CHROMA AMP
MIX
LOG
HA1
HA2
HA3
HA4
PB ON
LP
SP
QR501 MRN2404 (INV)
R569 1K
C527 1000P
R504 33K
C567 1000P
R501 100
R568 270
R502 1500
R514 270K
R513 10K
C525 0.01
R503 7500
R526 13K
R505 1800
R506 3900
C509 3300P
L502 33μ
C523 0.01
C503 1
C524 0.01
C506 0.01
C526 6V220
C505 0.01
C508 0.01
C507 0.01
C569 1
L552 33μ
C555 6V220
C556 0.01
R556 33K
R551 47K
L503 100μ
R571 100
R565 47K
R566 27K
R567 15K
R552 390
R570 1K
R557 1600
R554 24K
C554 0.01
R553 27K
C553 0.01
C552 0.01
C551 1000P
IC551 BA7743FS
A HEW
LP Ⓡ
AGC FL
VCR CTL
RF OUT
VCC
REC MUT
CR Ⓡ
REC IN
REC NF
REC Ⓡ
REC LEV
AGC DET
SP/LP
VCA
REC
SW
AGC VR
AGC DET
PRE FB
PRE IN Ⓡ
PRE GND
PRE IN Ⓛ
PRE FB
GND
REC OUT
REC LP
REC FL
REC VCC
REC L
IC502 AN3370K
OUTPUT DRIVE
OSC
Q501 MSB709 (BUFFER)
Q502 MSD601 (BUFFER)
R518 100
R519 100
R520 1500
R524 1800
R521 8200
C533 120P
R522 6200
C534 120P
R523 1500
C535 0.01
C536 0.1
R525 10K
C537 0.01
C539 68P
C538 68P
L504 5.6μ
C532 56P
C531 33P
C521 0.01
C520 0.1
R512 100
C519 0.1
C518 0.01
R511 100
C517 0.01
C516 0.1
R510 100
C515 0.1
C514 0.01
C513 0.1
C512 1000P
C511 0.1
C510 0.1
R509 100
R508 330
R507 390
L501 33μ
C540 16V47
L551 33μ
C557 0.01
C559 1
C560 470P
C561 470P
C564 1
R558 3300
R559 1500
R560 1500
R561 3300
R562 1K
C565 100P
C562 100P
C563 100P
TL551
R563 10
R564 220K
C566 0.1
E
D
C
B
A
1
2
3
4
5
6
7
8
9
10
11
12

——— VIDEO MAIN SIGNAL PATH IN REC MODE
——— VIDEO MAIN SIGNAL PATH IN PLAYBACK MODE
– – – Hi-Fi AUDIO MAIN SIGNAL PATH IN REC MODE
– – – Hi-Fi AUDIO MAIN SIGNAL PATH IN PLAYBACK MODE

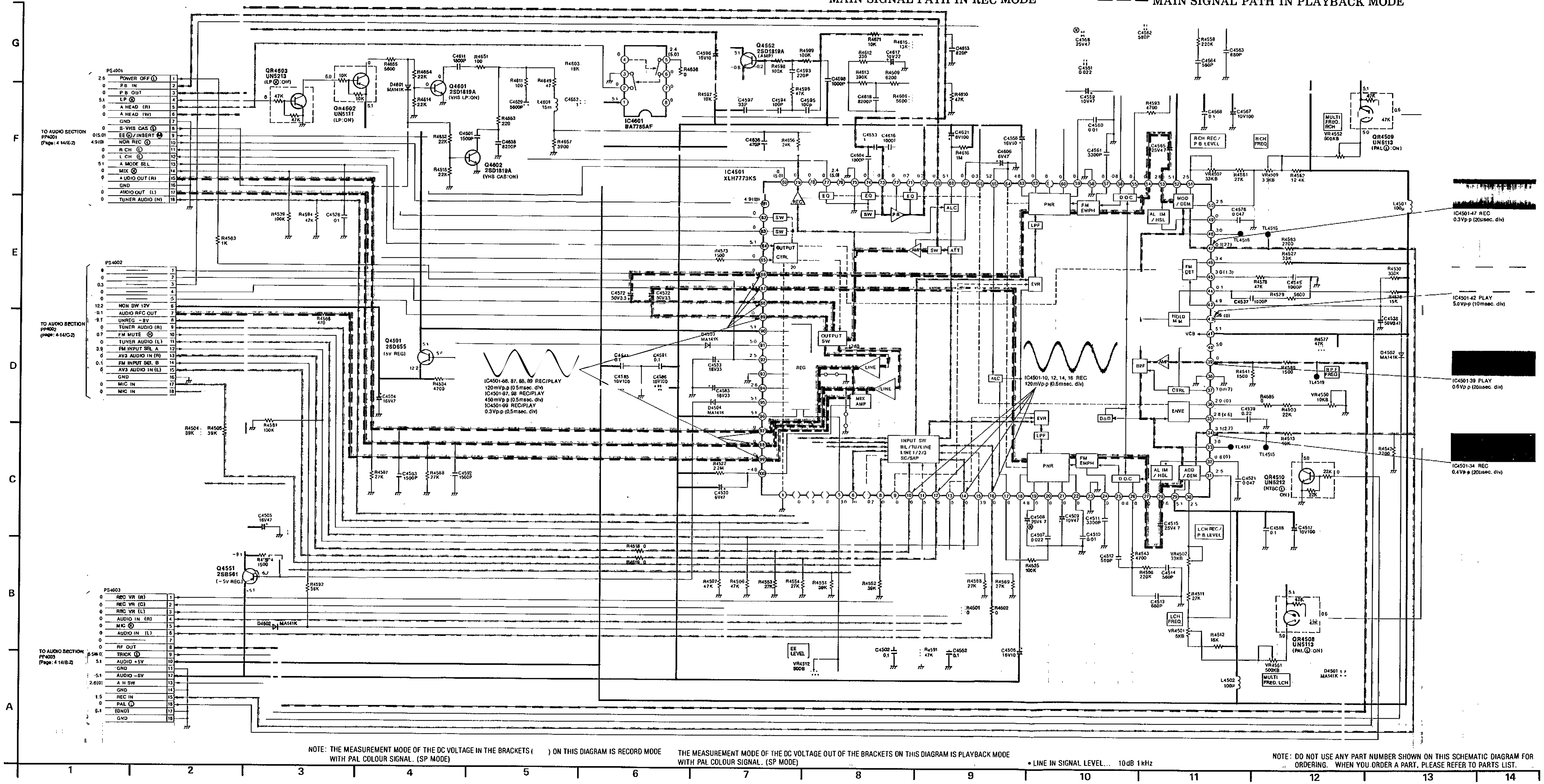
NOTE: DO NOT USE ANY PART NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR ORDERING. WHEN YOU ORDER A PART, PLEASE REFER TO PARTS LIST.

NOTE: THE MEASUREMENT MODE OF THE DC VOLTAGE IN THE BRACKETS (   ) ON THIS DIAGRAM IS RECORD MODE WITH PAL COLOUR SIGNAL. (S-VHS : SP MODE)
THE MEASUREMENT MODE OF THE DC VOLTAGE OUT OF THE BRACKETS ON THIS DIAGRAM IS PLAYBACK MODE WITH PAL COLOUR SIGNAL. (S-VHS : SP MODE)

4-17. Hi-Fi AUDIO PACK SCHEMATIC DIAGRAM

- - - - MAIN SIGNAL PATH IN REC MODE

— — — MAIN SIGNAL PATH IN PLAYBACK MODE


G
F
E
D
C
B
A
1
2
3
4
5
6
7
8
9
10
11
12
13
14
PS4001
TO AUDIO SECTION
PP4001
(Page: 4-14/E-2)
2.6 POWER OFF Ⓛ 1
0 P.B IN 2
0 P B OUT 3
5.1 LP Ⓗ 4
0 A HEAD (R) 5
0 A HEAD (W) 6
GND 7
0 S-VHS CAS Ⓛ 8
0(5.0) EE Ⓗ / INSERT Ⓜ 9
4.9(0) NOR REC Ⓛ 10
0 R CH Ⓛ 11
0 L CH Ⓛ 12
5.1 A MODE SEL 13
0 MIX Ⓗ 14
0 AUDIO OUT (R) 15
GND 16
0 AUDIO OUT (L) 17
0 TUNER AUDIO (N) 18
PS4002
TO AUDIO SECTION
PP4002
(Page: 4-14/C-2)
0 1
0 2
0.3 3
0 4
0 5
12.2 NON SW 12V 6
-0.1 AUDIO RFC OUT 7
-9.1 UNREG -8V 8
0 TUNER AUDIO (R) 9
0.7 FM MUTE Ⓗ 10
0 TUNER AUDIO (L) 11
3.9 FM INPUT SEL A 12
0 AV3 AUDIO IN (R) 13
0.1 FM INPUT SEL. B 14
0 AV3 AUDIO IN (L) 15
GND 16
0 MIC IN 17
0 MIC IN 18
PS4003
TO AUDIO SECTION
PP4003
(Page: 4-14/B-2)
0 REC VR (R) 1
0 REC VR (C) 2
0 REC VR (L) 3
0 AUDIO IN (R) 4
0 MIC Ⓗ 5
0 AUDIO IN (L) 6
0 7
0 RF OUT 8
5.5(6.0) TRICK Ⓛ 9
5.1 AUDIO +5V 10
GND 11
-5.1 AUDIO -5V 12
2.6(0) A H SW 13
GND 14
1.5 REC IN 15
0 PAL Ⓛ 16
5.1 (GND) 17
GND 18
QR4603
UN5213
(LP Ⓗ : ON)
47K
47K
QR4602
UN5111
(LP:ON)
10K
10K
R4655
5600
D4601
MA141K
R4654
22K
R4614
22K
Q4601
2SD1819A
(VHS LP:ON)
C4611
1800P
R4651
100
R4611
100
C4629
5600P
R4649
47
L4601
15m
C4652
1
R4603
18K
R4653
220
C4501
1500P
C4638
8200P
R4657
3900
R4552
22K
R4515
22K
Q4602
2SD1819A
(VHS CAS:ON)
R4539
100K
R4594
47K
C4528
0.1
IC4601
BA7765AF
R4638
0
C4596
16V10
R4597
10K
Q4552
2SD1819A
(AMP)
R4599
100K
R4598
100K
C4593
220P
C4597
33P
C4594
100P
C4595
10P
R4595
47K
R4671
10K
R4612
330
R4613
390K
C4617
10V22
R4615
13K
R4609
6200
C4618
8200P
R4606
5600
C4598
1000P
C4613
820P
R4610
47K
C4636
470P
R4656
24K
C4533
1
C4616
1000P
C4604
1800P
C4621
6V100
R4616
1M
C4556
16V10
C4606
6V47
IC4501
XLH7773KS
EQ
EQ
EQ
SW
SW
SW
REC
ALC
ATT
AMP
OUTPUT CTRL
OUTPUT SW
REG
LINE
LINE
MIX AMP
INPUT SW
BIL/TU/LINE
LINE 1/2/3
SC/SAP
PNR
FM EMPH
LPF
EVR
D O C
AL IM / HSL
MOD / DEM
FM DET
HOLD M M
BPF
AMP
CTRL
ENVE
DoD
ALC
ADD / DEM
R4573
1500
C4572
50V3.3
C4522
50V33
R4563
1K
R4568
470
Q4501
2SD655
(5V REG)
R4534
4700
C4504
16V47
D4523
MA141K
C4533
16V33
C4583
16V33
D4504
MA141K
C4541
0.1
C4591
0.1
C4585
10V100
C4586
10V100
R4504
39K
R4505
39K
R4581
100K
R4587
27K
C4503
1500P
R4588
27K
C4592
1500P
R4522
2.2M
C4530
6V47
C4505
16V47
Q4551
2SB561
(-5V REG)
R4592
56K
R4518
0
R4519
0
D4502
MA141K
R4507
47K
R4506
47K
R4553
27K
R4554
27K
R4551
36K
R4552
36K
EE LEVEL
VR4512
500B
C4502
0.1
R4591
47K
C4552
0.1
R4501
0
R4502
0
R4565
27K
R4569
27K
C4505
16V10
C4508
25V4.7
C4509
10V47
C4511
3300P
C4507
0.022
C4510
0.01
R4535
100K
C4512
560P
R4543
4700
R4506
220K
C4514
560P
C4515
25V4.7
LCH REC / P B LEVEL
VR4502
33KB
C4513
680P
R4511
27K
LCH FREQ.
VR4501
5KB
R4512
15K
L4502
100μ
VR4551
500KB
MULTI FREQ. LCH
QR4508
UN5113
(PAL Ⓛ : ON)
47K
47K
D4501
MA141K
C4518
0.1
C4517
10V100
QR4510
UN5212
(NTSC Ⓛ : ON)
22K
22K
C4521
0.047
R4513
10K
TL4517
TL4515
R4542
2200
C4539
0.22
R4503
22K
R4585
VR4550
10KB
R4541
1500
R4586
1500
BPF FREQ
TL4519
R4577
47K
D4502
MA141K
C4538
50V0.47
R4538
15K
R4530
330K
R4529
5600
C4537
1000P
R4578
47K
C4545
1000P
C4578
0.047
TL4516
TL4518
R4583
2700
R4527
33K
L4501
100μ
VR4507
33KB
R4561
27K
VR4509
33KB
R4562
12.4K
RCH REC / P B LEVEL
RCH FREQ
MULTI FREQ. RCH
VR4552
500KB
QR4509
UN5113
(PAL Ⓛ : ON)
47K
47K
R4558
220K
C4563
680P
C4564
560P
C4568
0.1
C4567
10V100
C4565
25V4.7
R4593
4700
C4561
3300P
C4560
0.01
C4559
10V47
C4558
25V47
C4551
0.022
C4562
560P
VCB
IC4501-68, 87, 88, 89 REC/PLAY
120mVp.p (0.5msec. div)
IC4501-97, 98 REC/PLAY
450mVp-p (0.5msec. div)
IC4501-99 REC/PLAY
0.3Vp-p (0.5msec. div)
IC4501-10, 12, 14, 16 REC
120mVp-p (0.5msec. div)
IC4501-47 REC
0.3Vp-p (20μsec. div)
IC4501-42 PLAY
5.0Vp-p (10msec. div)
IC4501-39 PLAY
0.6Vp-p (20μsec. div)
IC4501-34 REC
0.4Vp-p (20μsec. div)

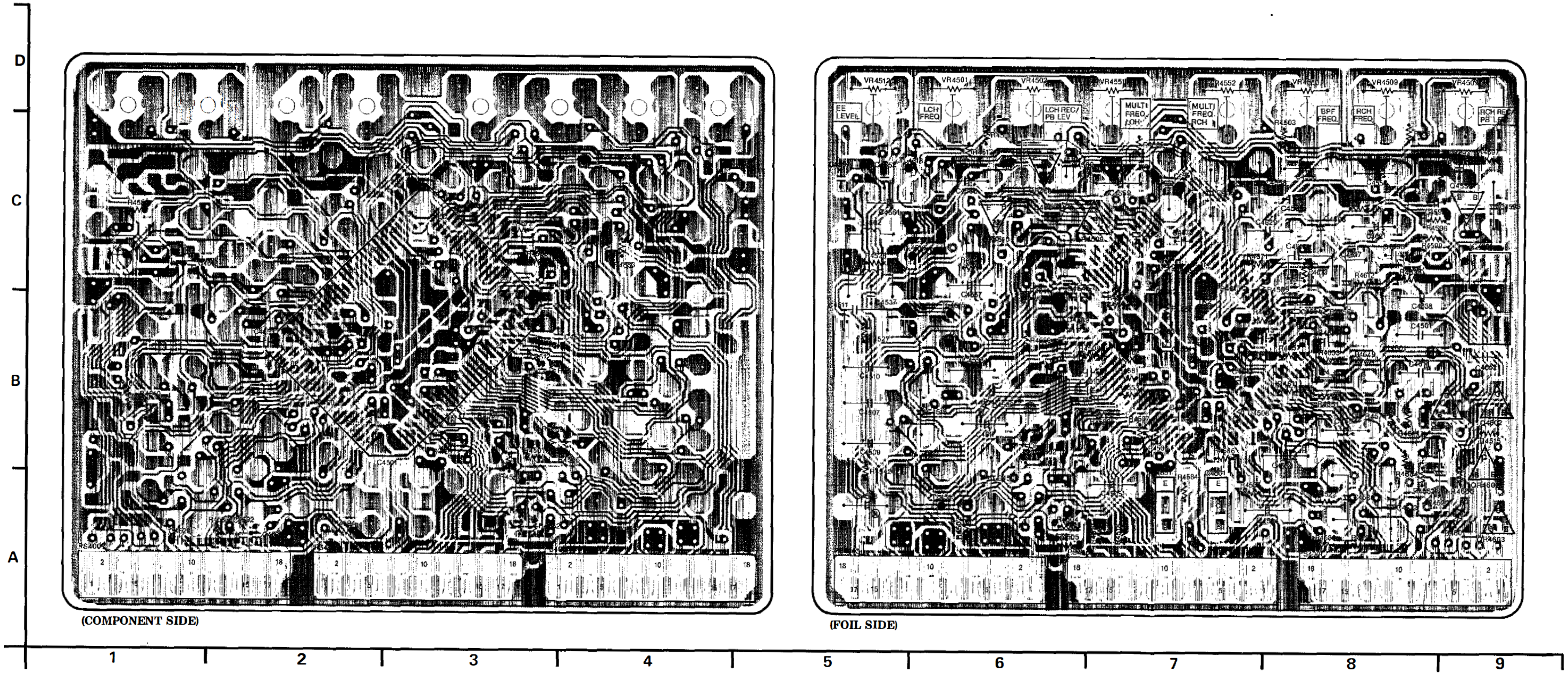
NOTE: THE MEASUREMENT MODE OF THE DC VOLTAGE IN THE BRACKETS ( ) ON THIS DIAGRAM IS RECORD MODE WITH PAL COLOUR SIGNAL. (SP MODE)

THE MEASUREMENT MODE OF THE DC VOLTAGE OUT OF THE BRACKETS ON THIS DIAGRAM IS PLAYBACK MODE WITH PAL COLOUR SIGNAL. (SP MODE)

• LINE IN SIGNAL LEVEL... 10dB 1kHz

NOTE: DO NOT USE ANY PART NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR ORDERING. WHEN YOU ORDER A PART, PLEASE REFER TO PARTS LIST.

4-18. Hi-Fi AUDIO PACK C.B.A. (VEP04447E)


(COMPONENT SIDE)

(FOIL SIDE)

D
C
B
A
1
2
3
4
5
6
7
8
9
PS4001
C4501
VR4512
VR4501
VR4502
VR4551
VR4552
VR4509
EE LEVEL
LCH FREQ
LCH REC/ PB LEV
MULTI FREQ LCH
MULTI FREQ RCH
BPF FREQ
RCH FREQ
RCH REC/ PB LEV
2
10
18

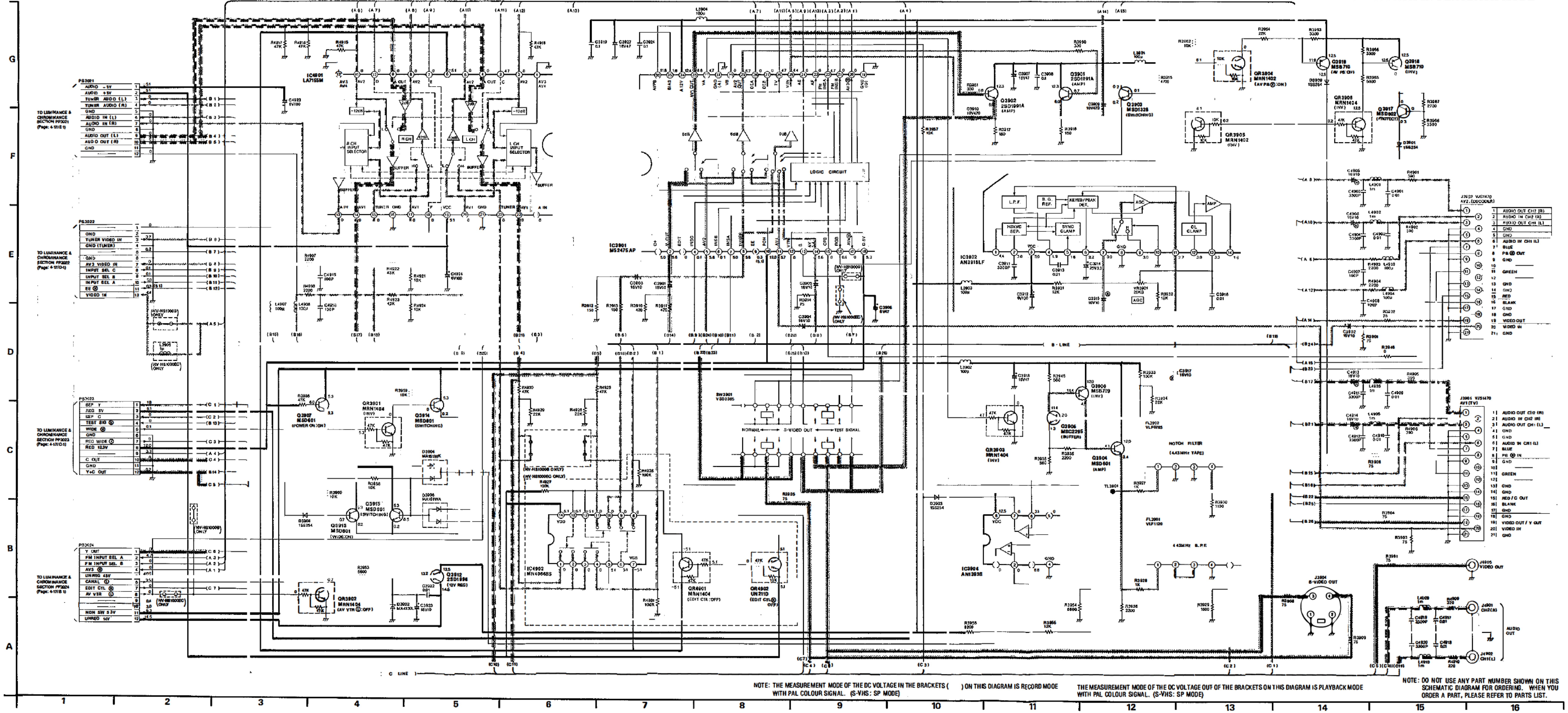
HI-FI AUDIO PACK C.B.A.

Transistor	
Q4501	A-7
Q4551	A-7
Q4552	C-9
Q4601	B-9
Q4602	B-9
Transistor & Resistor	
QR4508	C-6
QR4509	C-7
QR4510	C-6
QR4602	A-9
QR4603	A-9
Integrated Circuit	
IC4501	B-3
IC4601	C-9
Adjustment	
VR4501	D-6
VR4502	D-6
VR4507	D-9
VR4509	D-8
VR4512	D-5
VR4550	D-8
VR4551	D-7
VR4552	D-7
Connector	
PS4001	A-1
PS4001	A-6
PS4002	A-2
PS4002	A-7
PS4003	A-4
PS4003	A-5

ADDRESS INFORMATION

4-19. INPUT/OUTPUT PACK SCHEMATIC DIAGRAM

VIDEO MAIN SIGNAL PATH IN REC MODE
VIDEO MAIN SIGNAL PATH IN PLAYBACK MODE
AUDIO MAIN SIGNAL PATH IN REC MODE
AUDIO MAIN SIGNAL PATH IN PLAYBACK MODE



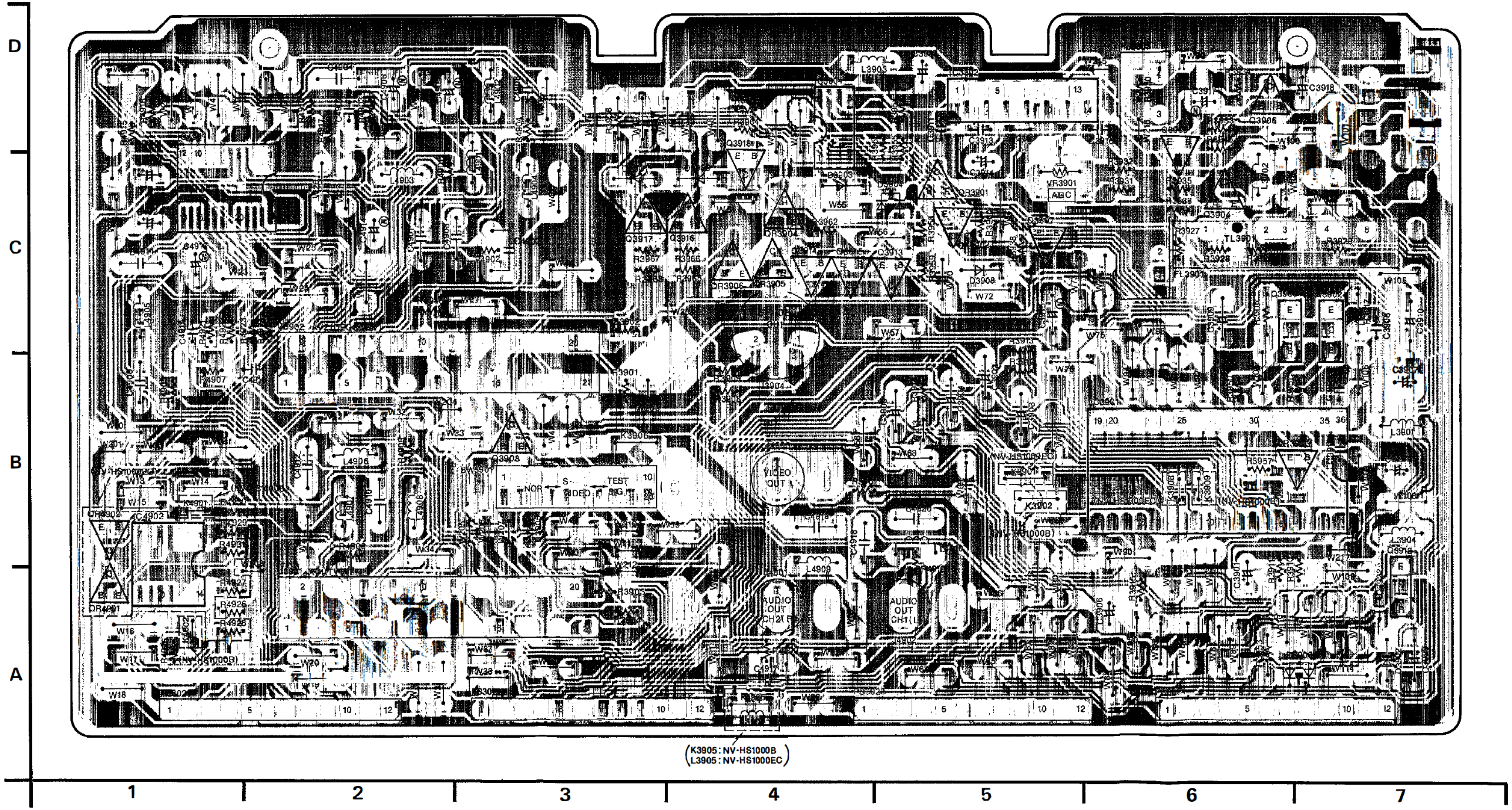
G
F
E
D
C
B
A
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
PS3021
AUDIO -5V
AUDIO +5V
TUNER AUDIO (L)
TUNER AUDIO (R)
GND
AUDIO IN (L)
AUDIO IN (R)
GND
AUDIO OUT (L)
AUDIO OUT (R)
GND
TO LUMINANCE & CHROMINANCE SECTION PP3021 (Page: 4-17/E-1)
PS3022
GND
TUNER VIDEO IN
GND (TUNER)
GND
AV3 VIDEO IN
INPUT SEL C
INPUT SEL B
INPUT SEL A
EE Ⓗ
VIDEO IN
TO LUMINANCE & CHROMINANCE SECTION PP3022 (Page: 4-17/D-1)
(NV-HS1000B) ONLY
(NV-HS1000EC) ONLY
PS3023
SEP Y
REG 5V
SEP C
TEST SIG Ⓗ
WIDE Ⓗ
GND
REC WIDE Ⓗ
REG 12.3V
C OUT
GND
Y+C OUT
TO LUMINANCE & CHROMINANCE SECTION PP3023 (Page: 4-17/C-1)
PS3024
Y OUT
FM INPUT SEL A
FM INPUT SEL B
AV3 Ⓗ
UNREG 45V
CANAL Ⓛ
EDIT CTL Ⓗ
AV VTR Ⓛ
NON SW 5.3V
UNREG 14V
TO LUMINANCE & CHROMINANCE SECTION PP3024 (Page: 4-17/B-1)
IC4901 LA7155M
R-CH INPUT SELECTOR
L-CH INPUT SELECTOR
BUFFER
IC3901 M52475AP
LOGIC CIRCUIT
IC3902 AN3915LF
L.P.F
B.G. REF.
KEYED/PEAK DET.
AGC
AMP
H.SYNC SEP.
SYNC CLAMP
CL CLAMP
Q3902 2SD1991A (AMP)
Q3901 2SD1991A (AMP)
Q3903 MSD1328 (SWITCHING)
QR3904 MRN1402 (AV PB Ⓗ:ON)
Q3918 MSB710 (AV PB ON)
Q3916 MSB710 (INV)
QR3906 MRN1404 (INV)
Q3917 MSD602 (PROTECT)
QR3905 MRN1402 (INV)
J3902 VJS1470 AV2 (DECODER)
1 AUDIO OUT CH2 (R)
2 AUDIO IN CH2 (R)
3 AUDIO OUT CH1 (L)
4 GND
5 GND
6 AUDIO IN CH1 (L)
7 BLUE
8 PB Ⓗ OUT
9 GND
11 GREEN
13 GND
14 GND
15 RED
16 BLANK
17 GND
18 GND
19 VIDEO OUT
20 VIDEO IN
21 GND
J3901 VJS1470 AV1 (TV)
1 AUDIO OUT CH2 (R)
2 AUDIO IN CH2 (R)
3 AUDIO OUT CH1 (L)
4 GND
5 GND
6 AUDIO IN CH1 (L)
7 BLUE
8 PB Ⓗ IN
9 GND
11 GREEN
13 GND
14 GND
15 RED / C OUT
16 BLANK
17 GND
18 GND
19 VIDEO OUT / Y OUT
20 VIDEO IN
21 GND
J4905 VIDEO OUT
J4901 CH2 (R)
J4902 CH1 (L)
AUDIO OUT
J3904 S-VIDEO OUT
Q3907 MSD601 (POWER ON:ON)
QR3901 MRN1404 (INV)
Q3914 MSD601 (SWITCHING)
D3904 MA151WK
D3906 MA151WA
Q3915 MSD601 (SWITCHING)
Q3913 MSD601 (WIDE:ON)
D3908 1SS254
QR3902 MRN1404 (AV VTR Ⓛ:OFF)
Q3912 2SD1996 (12V REG)
D3902 MA4130L
IC4902 MN4066BS
QR4901 MRN1404 (EDIT CTL:OFF)
QR4902 UN211D (EDIT CTL Ⓛ OFF)
SW3901 VSS0385
NORMAL
S-VIDEO OUT
TEST SIGNAL
Q3906 MSB709 (INV)
Q3905 MSC2295 (BUFFER)
QR3903 MRN1404 (INV)
Q3904 MSD601 (AMP)
FL3902 VLF0785
NOTCH FILTER (4.43MHz TAPE)
FL3901 VLF1120
4.43MHz B.P.F
IC3904 AN1393S
D3903 1SS254
TL3901
B LINE
C LINE

NOTE: THE MEASUREMENT MODE OF THE DC VOLTAGE IN THE BRACKETS ( ) ON THIS DIAGRAM IS RECORD MODE WITH PAL COLOUR SIGNAL. (S-VHS: SP MODE)

THE MEASUREMENT MODE OF THE DC VOLTAGE OUT OF THE BRACKETS ON THIS DIAGRAM IS PLAYBACK MODE WITH PAL COLOUR SIGNAL. (S-VHS: SP MODE)

NOTE: DO NOT USE ANY PART NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR ORDERING. WHEN YOU ORDER A PART, PLEASE REFER TO PARTS LIST.

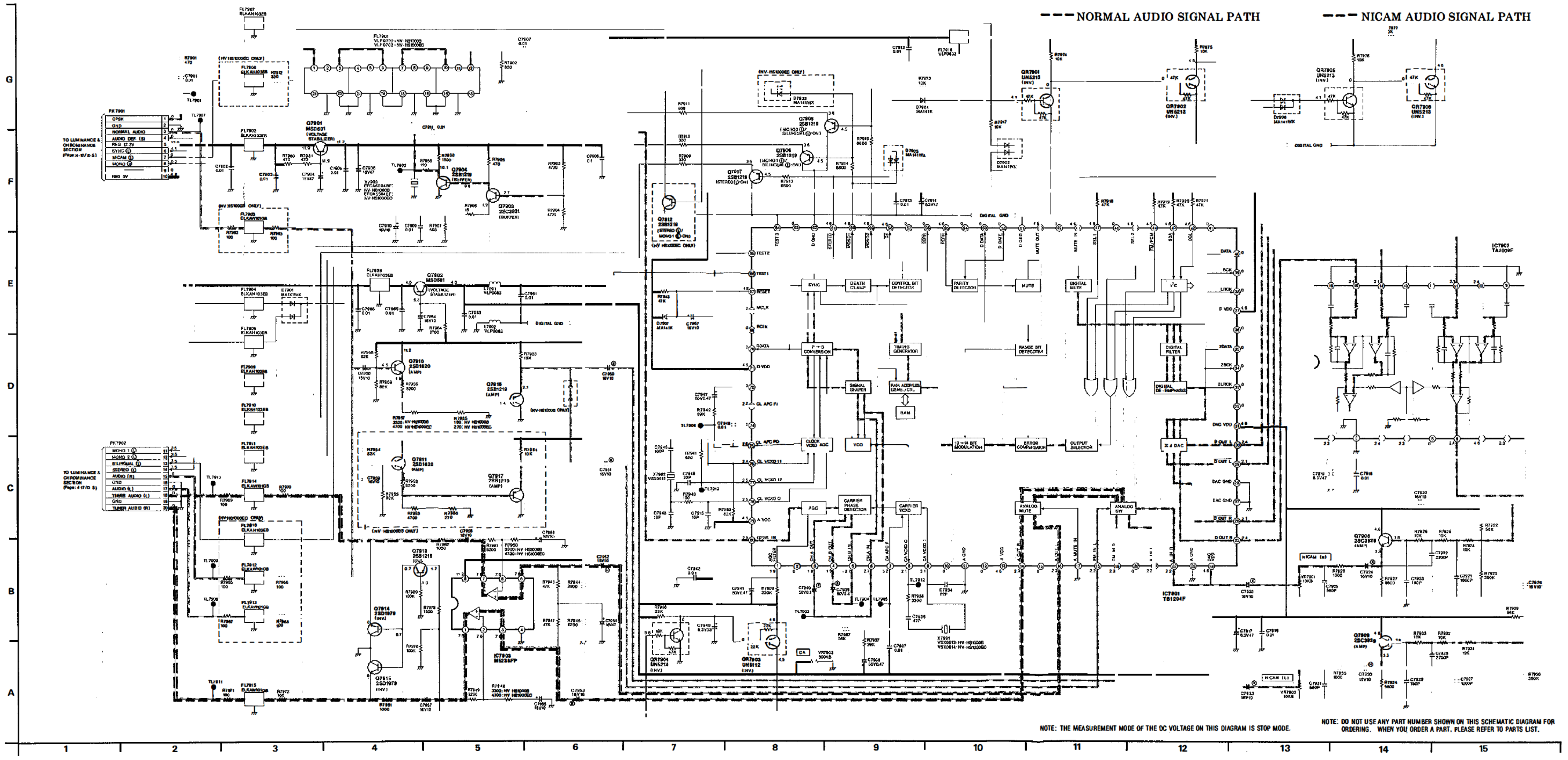
4-20. INPUT/OUTPUT PACK C.B.A. (VEP03A72D: NV-HS1000B) (VEP03A72B: NV-HS1000EC)


D
C
B
A
1
2
3
4
5
6
7
VIDEO OUT
AUDIO OUT CH2(L)
AUDIO OUT CH1(R)
NOR
S-VIDEO
TEST SIG
VR3901
ABC
TL3901
FL3901
L3901
L3902
L3903
L3904
L4903
L4905
L4909
Q3901
Q3902
Q3903
Q3904
Q3905
Q3906
Q3912
Q3913
Q3917
Q3918
QR3901
QR3903
QR3905
QR3906
QR4901
QR4902
IC3901
IC3904
C3918
C4902
K3901
K3902
K3905
(NV-HS1000EC)
(NV-HS1000B)
W16
W17
W18
W20
W23
W25
W32
W34
W55
W56
W57
W66
W72
W75
W76
W105
W106
W108
W217
(K3905 : NV-HS1000B
L3905 : NV-HS1000EC)

INPUT/OUTPUT PACK C.B.A.	
Transistor	
Q3901	C-6
Q3902	C-7
Q3903	B-3
Q3904	C-6
Q3905	D-6
Q3906	D-6
Q3907	C-5
Q3912	B-7
Q3913	C-5
Q3914	C-4
Q3915	C-4
Q3916	C-4
Q3917	C-3
Q3918	C-4
Transistor & Resistor	
QR3901	C-5
QR3902	C-5
QR3903	B-7
QR3904	C-4
QR3905	C-4
QR3906	C-4
QR4901	A-1
QR4902	B-1
Integrated Circuit	
IC3901	B-6
IC3902	D-5
IC3904	D-4
IC4901	C-1
IC4902	B-1
Adjustment	
VR3901	C-5
Connector	
PS3021	A-1
PS3022	A-3
PS3023	A-5
PS3024	A-6

ADDRESS INFORMATION

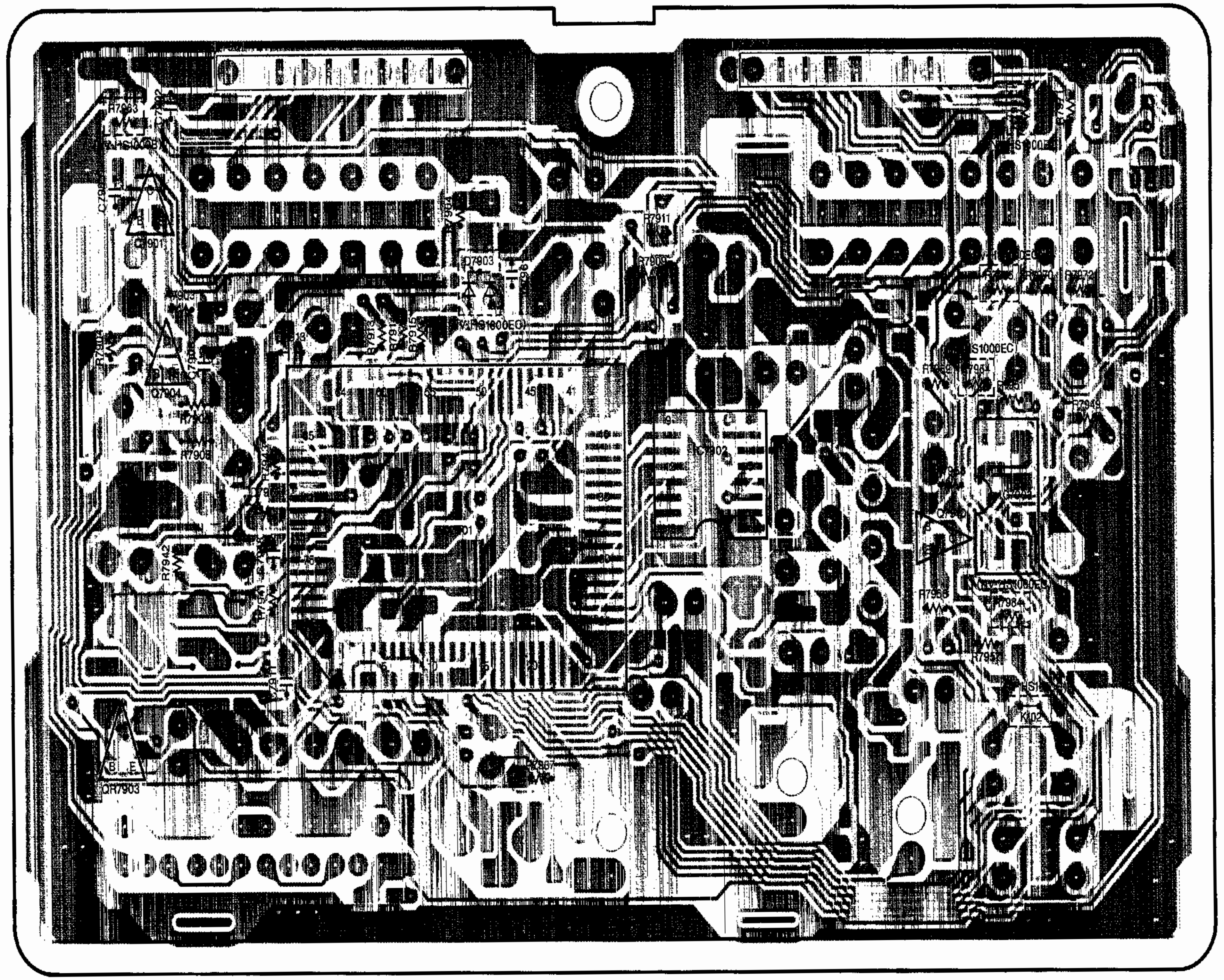
4-21. NICAM DECODER PACK SCHEMATIC DIAGRAM


NORMAL AUDIO SIGNAL PATH
NICAM AUDIO SIGNAL PATH
PK7901
QPSK
GND
NORMAL AUDIO
AUDIO DEF. (S)
REG 12.3V
SYNC
NICAM
MONO
REG 5V
TO LUMINANCE & CHROMINANCE SECTION (Page 4-17/2-5)
PK7902
MONO 1
MONO 2
BILINGUAL
STEREO
AUDIO (R)
GND
AUDIO (L)
TUNER AUDIO (L)
GND
TUNER AUDIO (R)
TO LUMINANCE & CHROMINANCE SECTION (Page 4-17/2-5)
Q7901 MSD601 (VOLTAGE STABILIZER)
Q7902 MSD601 (VOLTAGE STABILIZER)
Q7904 2SB1219 (BUFFER)
Q7903 2SC3931 (BUFFER)
Q7910 2SD1620 (AMP)
Q7916 2SB1219 (AMP)
Q7911 2SD1620 (AMP)
Q7917 2SB1219 (AMP)
Q7913 2SB1218
Q7914 2SD1979 (INV)
Q7915 2SD1979 (INV)
IC7903 M5238FP
Q7905 2SB1219
Q7906 2SB1219
Q7907 2SB1219
Q7912 2SB1219
QR7901 UN5213 (INV)
QR7902 UN5212 (INV)
QR7905 UN5213 (INV)
QR7906 UN5213 (INV)
QR7904 UN5214 (INV)
QR7903 UN5112 (INV)
DIGITAL GND
SYNC
DEATH CLAMP
CONTROL BIT DETECTOR
PARITY DETECTOR
MUTE
DIGITAL MUTE
I²C
S→P CONVERSION
TIMING GENERATOR
RANGE BIT DETECTOR
DIGITAL FILTER
SIGNAL SHAPER
RAM ADDRESS GENE./CTL
RAM
DIGITAL DE-EMPHASIS
CLOCK VCXO AGC
VCO
10→14 BIT MODULATION
ERROR COMPENSATOR
OUTPUT SELECTOR
Σ Δ DAC
AGC
CARRIER PHASE DETECTOR
CARRIER VCXO
ANALOG MUTE
ANALOG SW
IC7901 TB1204F
IC7902 TA2009F
Q7908 2SC2878 (AMP)
Q7909 2SC2878 (AMP)
NICAM (R)
NICAM (L)
(NV-HS1000EC ONLY)
G
F
E
D
C
B
A
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15

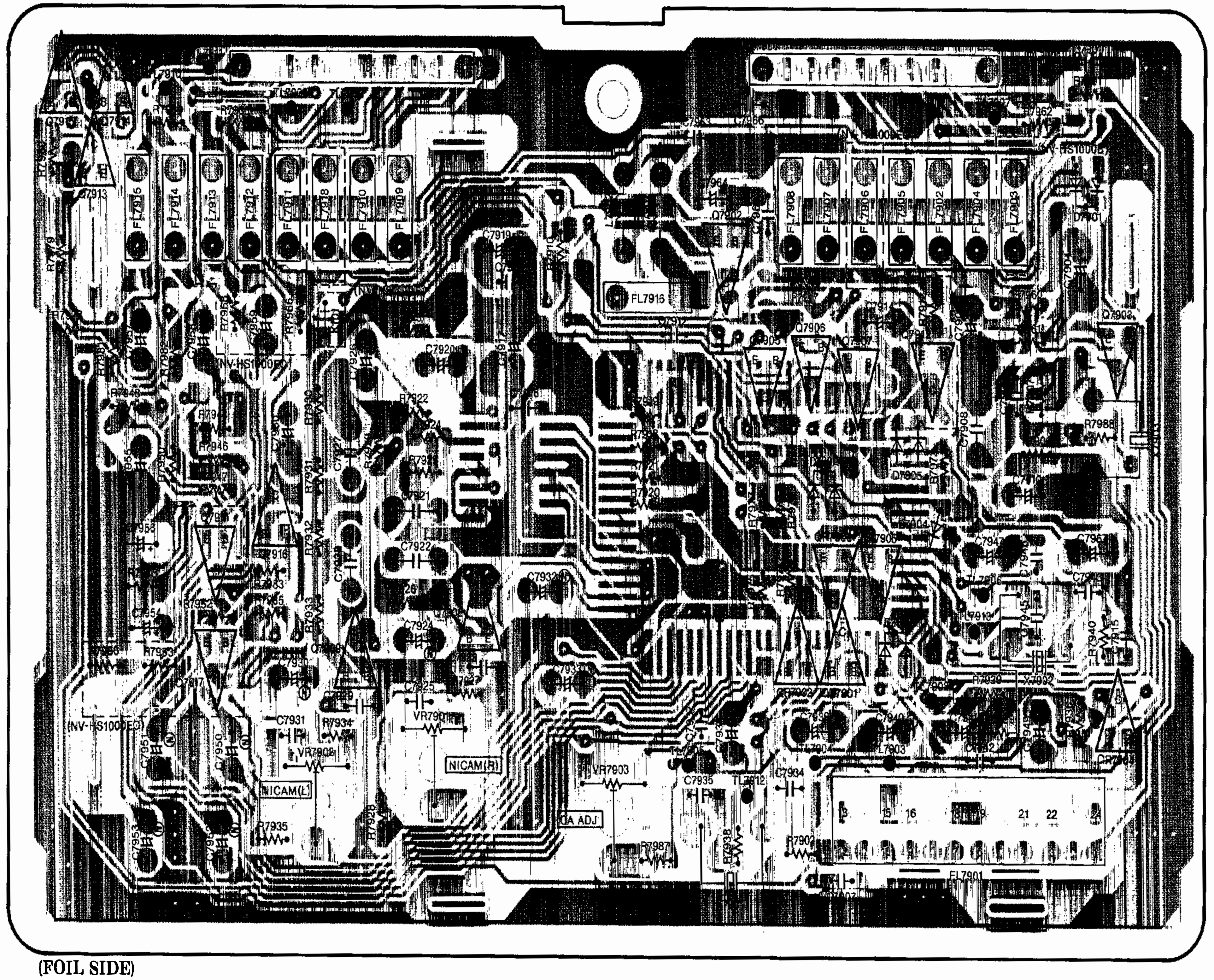
NOTE: THE MEASUREMENT MODE OF THE DC VOLTAGE ON THIS DIAGRAM IS STOP MODE.

NOTE: DO NOT USE ANY PART NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR ORDERING. WHEN YOU ORDER A PART, PLEASE REFER TO PARTS LIST.

4-22. NICAM DECODER PACK C.B.A. (VEP07675A: NV-HS1000B) (VEP07675D: NV-HS1000EC)


D
C
B
A
1
2
3
4
5
NV-HS1000EC
QR7903
R7942
R7900

(COMPONENT SIDE)

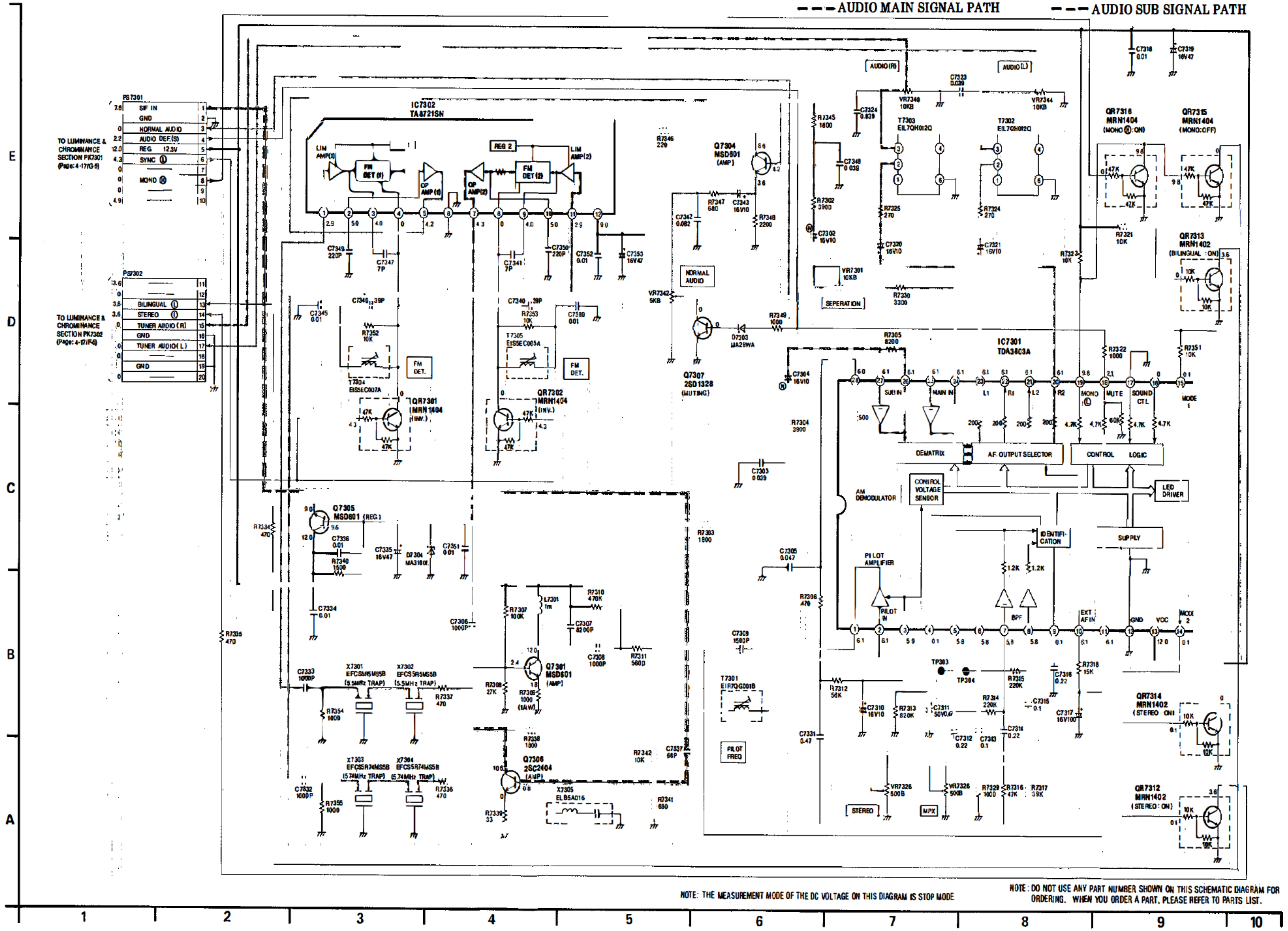

6
7
8
9
10
FL7916
FL7901
C7931
R7934
VR7901
VR7902
VR7903
NICAM(L)
NICAM(R)
DA ADJ
(NV-HS1000EC)
C7935
C7904
R7935
R7986

(FOIL SIDE)

NICAM DECODER PACK C.B.A.	
Transistor	
Q7901	C-1
Q7902	C-9
Q7903	C-10
Q7904	C-1
Q7905	C-9
Q7906	C-9
Q7907	C-9
Q7908	B-8
Q7909	B-7
Q7910	B-4
Q7911	B-7
Q7912	C-10
Q7913	C-6
Q7914	D-6
Q7915	D-6
Q7916	B-7
Q7917	B-7
Transistor & Resistor	
QR7901	B-5
QR7902	B-9
QR7903	A-1
QR7904	A-10
QR7905	B-9
QR7906	B-9
Integrated Circuit	
IC7901	B-2
IC7902	B-3
IC7903	B-5
Adjustment	
VR7901	A-8
VR7902	A-7
VR7903	A-8
Connector	
PK7901	D-2
PK7901	D-9
PK7902	D-4
PK7902	D-7

ADDRESS INFORMATION

4-23. DECODER PACK SCHEMATIC DIAGRAM (NV-HS1000EC)


AUDIO MAIN SIGNAL PATH
AUDIO SUB SIGNAL PATH
PS7301
SIF IN
GND
NORMAL AUDIO
AUDIO DEF.(S)
REG 12.3V
SYNC
MONO
TO LUMINANCE & CHROMINANCE SECTION PX7301 (Page: 4-17(G-5))
PS7302
BILINGUAL
STEREO
TUNER AUDIO (R)
GND
TUNER AUDIO (L)
GND
TO LUMINANCE & CHROMINANCE SECTION PK7302 (Page: 4-17(F-6))
IC7302
TA8721SN
LIM AMP(1)
FM DET (1)
OP AMP (1)
REG 2
OP AMP(2)
FM DET (2)
LIM AMP(2)
Q7304
MSD601
(AMP)
Q7307
2SD1328
(MUTING)
NORMAL AUDIO
SEPERATION
AUDIO (R)
AUDIO (L)
T7303
T7302
QR7316
MRN1404
(MONO: ON)
QR7315
MRN1404
(MONO:OFF)
QR7313
MRN1402
(BILINGUAL : ON)
T7304
T7305
QR7301
MRN1404
QR7302
MRN1404
FM DET.
IC7301
TDA3803A
SUB IN
MAIN IN
MONO
MUTE
SOUND CTL
MODE
DEMATRIX
A.F. OUTPUT SELECTOR
CONTROL LOGIC
LED DRIVER
CONTROL VOLTAGE SENSOR
AM DEMODULATOR
IDENTIFI-CATION
SUPPLY
PILOT AMPLIFIER
BPF
EXT AFIN
GND
VCC
Q7305
MSD601
(REG.)
Q7301
MSD601
(AMP)
Q7306
2SC2404
(AMP)
X7301
X7302
X7303
X7304
X7305
T7301
PILOT FREQ
STEREO
MPX
TP303
TP304
QR7314
MRN1402
(STEREO : ON)
QR7312
MRN1402
(STEREO : ON)
E
D
C
B
A
1
2
3
4
5
6
7
8
9
10

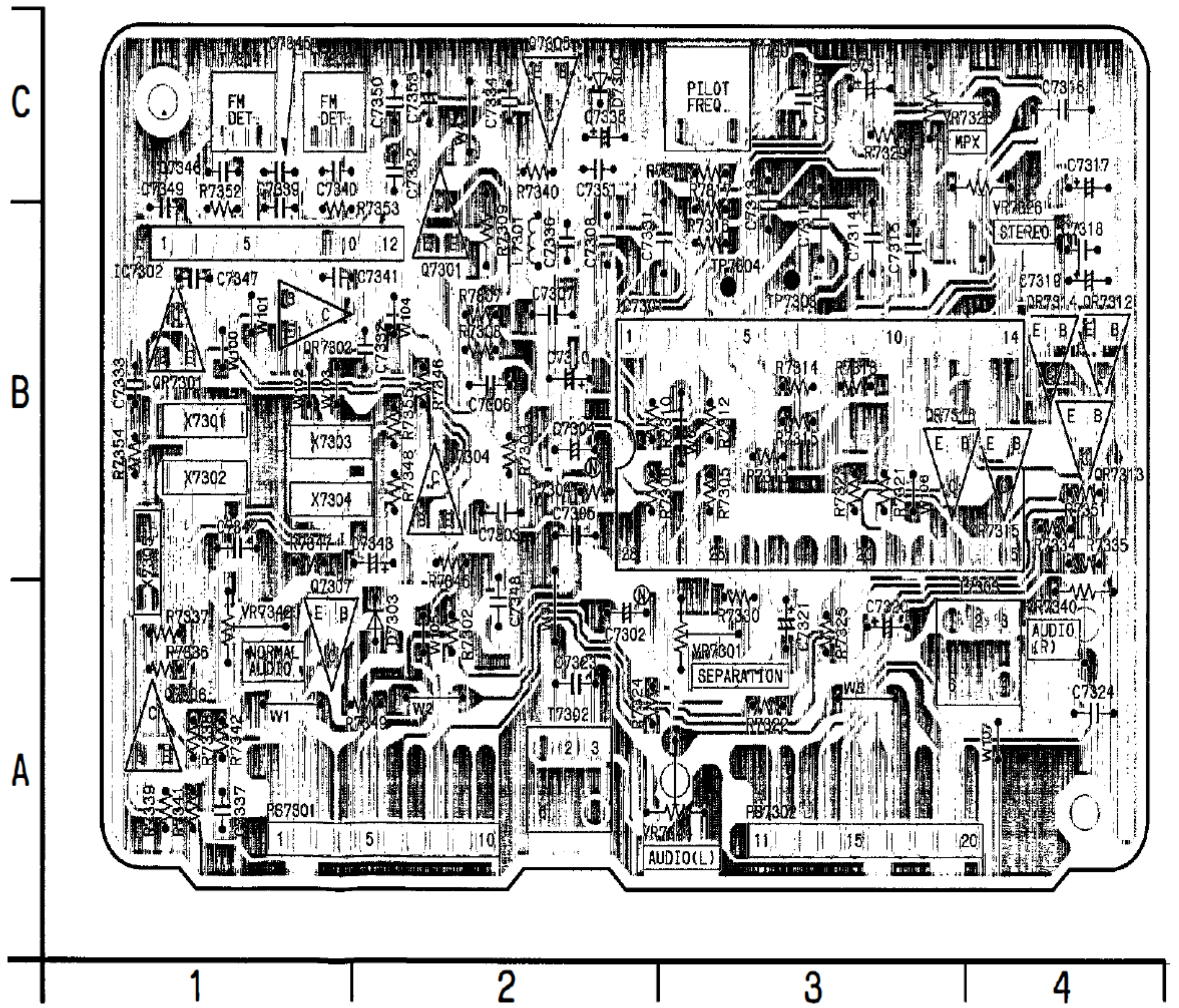
NOTE: THE MEASUREMENT MODE OF THE DC VOLTAGE ON THIS DIAGRAM IS STOP MODE.

NOTE: DO NOT USE ANY PART NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR ORDERING. WHEN YOU ORDER A PART, PLEASE REFER TO PARTS LIST.

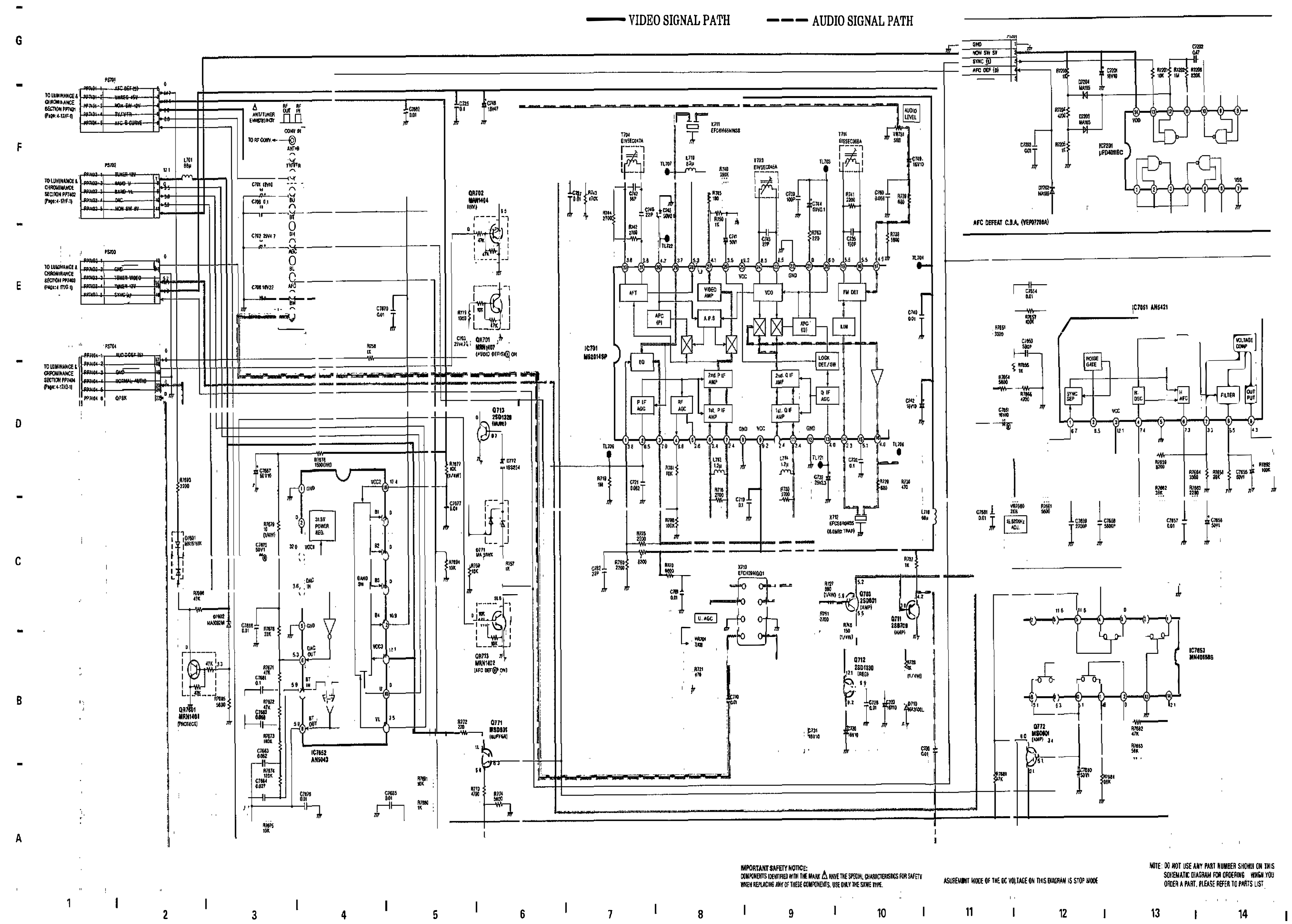
4-24. DECODER PACK C.B.A. (VEP07671A: NV-HS1000EC)

DECODER PACK C.B.A.	
Transistor	
Q7301	B-2
Q7304	B-2
Q7305	C-2
Q7306	A-1
Q7307	A-1
Transistor & Resistor	
QR7301	B-1
QR7302	B-1
QR7312	B-4
QR7313	B-4
QR7314	B-4
QR7315	B-4
QR7316	B-3
Integrated Circuit	
IC7301	B-3
IC7302	B-1
Test Point	
TP7303	B-3
TP7304	B-3
Adjustment	
T7301	C-3
T7302	A-2
T7303	A-4
T7304	C-1
T7305	C-1
VR7301	A-3
VR7326	C-4
VR7328	C-3
VR7340	A-4
VR7342	A-1
VR7344	A-3
Connector	
PS7301	A-1
PS7302	A-3

ADDRESS INFORMATION


C
B
A
1
2
3
4
FM DET.
FM DET.
PILOT FREQ.
MPX
STEREO
IC7302
IC7301
X7301
X7302
X7303
X7304
NORMAL AUDIO
SEPARATION
AUDIO (R)
AUDIO(L)
PS7301
PS7302
T7302
Q7301
Q7307
QR7301
QR7302
QR7313
TP7303
TP7304

4-25. TV DEMODULATOR PACK SCHEMATIC DIAGRAM (NV-HS1000B)


VIDEO SIGNAL PATH
AUDIO SIGNAL PATH
G
F
E
D
C
B
A
1
2
3
4
5
6
7
8
9
10
11
12
13
14
IC701 M52014SP
IC7652 AN5043
IC7651 AN5421
IC7653 MN4066BS
IC7201 µPD4001BC
AFC DEFEAT C.B.A. (VEP07786A)
Q713 2SD1328
Q771 MS0801
Q703 2SC2021
Q711 2SB709
Q712 2SD1328
Q772 MS0801
QR702 MRN1404
QR701 MRN1407
QR7601 MRN1404
TO LUMINANCE & CHROMINANCE SECTION

IMPORTANT SAFETY NOTICE:
COMPONENTS IDENTIFIED WITH THE MARK ⚠ HAVE THE SPECIAL CHARACTERISTICS FOR SAFETY
WHEN REPLACING ANY OF THESE COMPONENTS, USE ONLY THE SAME TYPE.

ASUREMENT MODE OF THE DC VOLTAGE ON THIS DIAGRAM IS STOP MODE

NOTE: DO NOT USE ANY PART NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR ORDERING WHEN YOU ORDER A PART, PLEASE REFER TO PARTS LIST

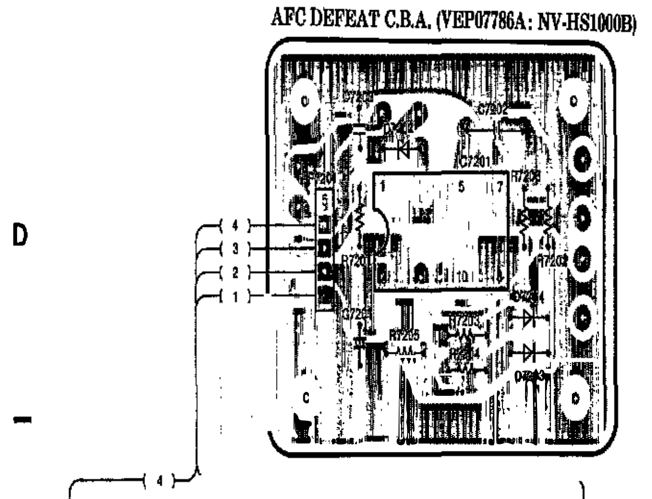
4-26. TV DEMODULATOR PACK C.B.A. (VEP07680K: NV-HS1000B)

TV DEMODULATOR PACK C.B.A.

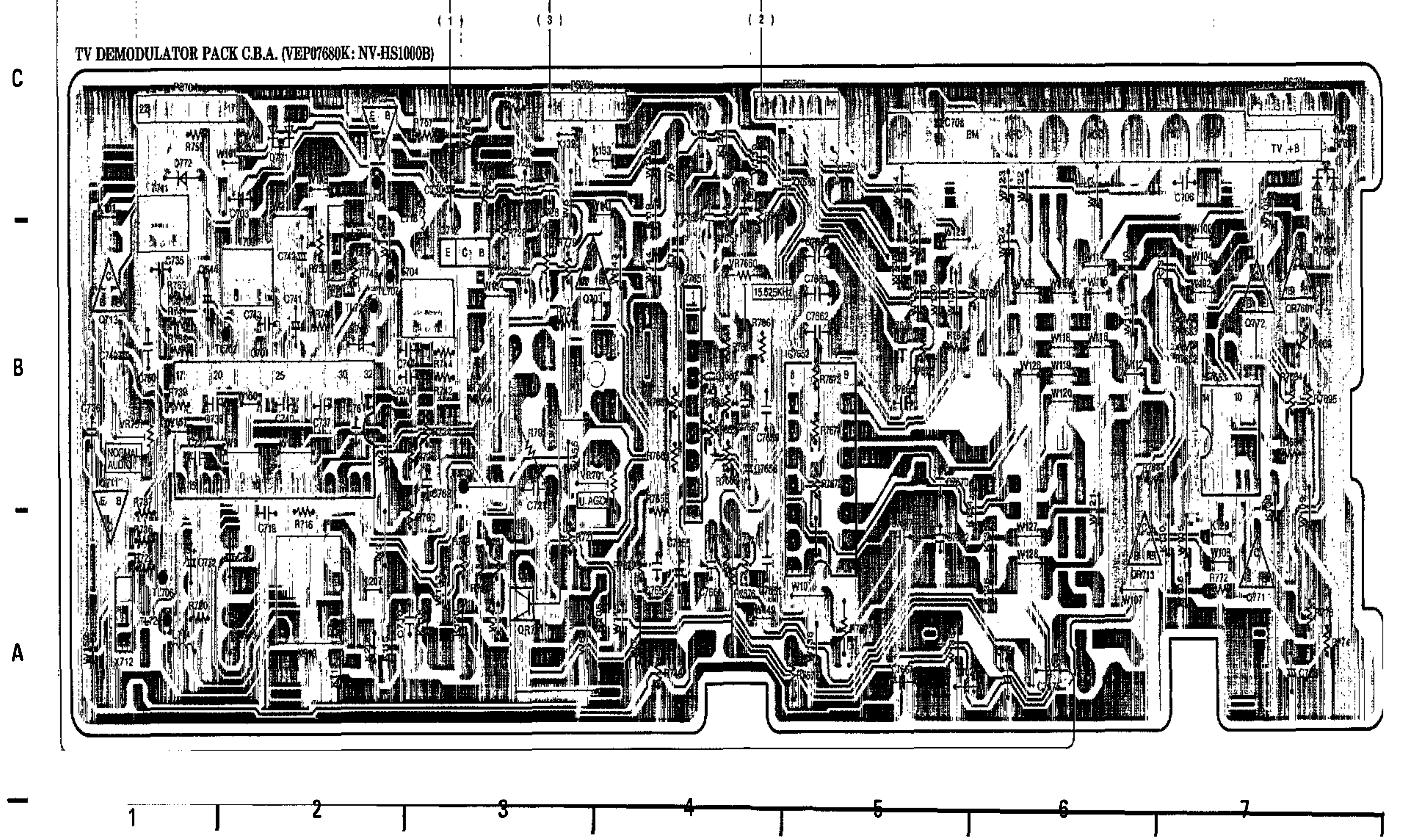
Transistor		Adjustment	
Q703	B-3	T703	B-2
Q711	B-1	T704	B-3
Q712	B-3	T711	C-1
Q713	B-1	VR701	B-4
Q771	A-7	VR751	B-1
Q772	B-7	VR7660	B-4
Transistor & Resistor		**Connector**	
QR701	A-3	P7201	D-2
QR702	C-2	PS701	C-7
QR713	A-6	PS702	C-5
QR7601	B-7	PS703	C-3
		PS704	C-1
Integrated Circuit			
IC701	B-2		
IC7201	D-2		
IC7651	B-4		
IC7652	B-5		
IC7653	B-7		

ADDRESS INFORMATION

AFC DEFEAT C.B.A. (VEP07786A: NV-HS1000B)

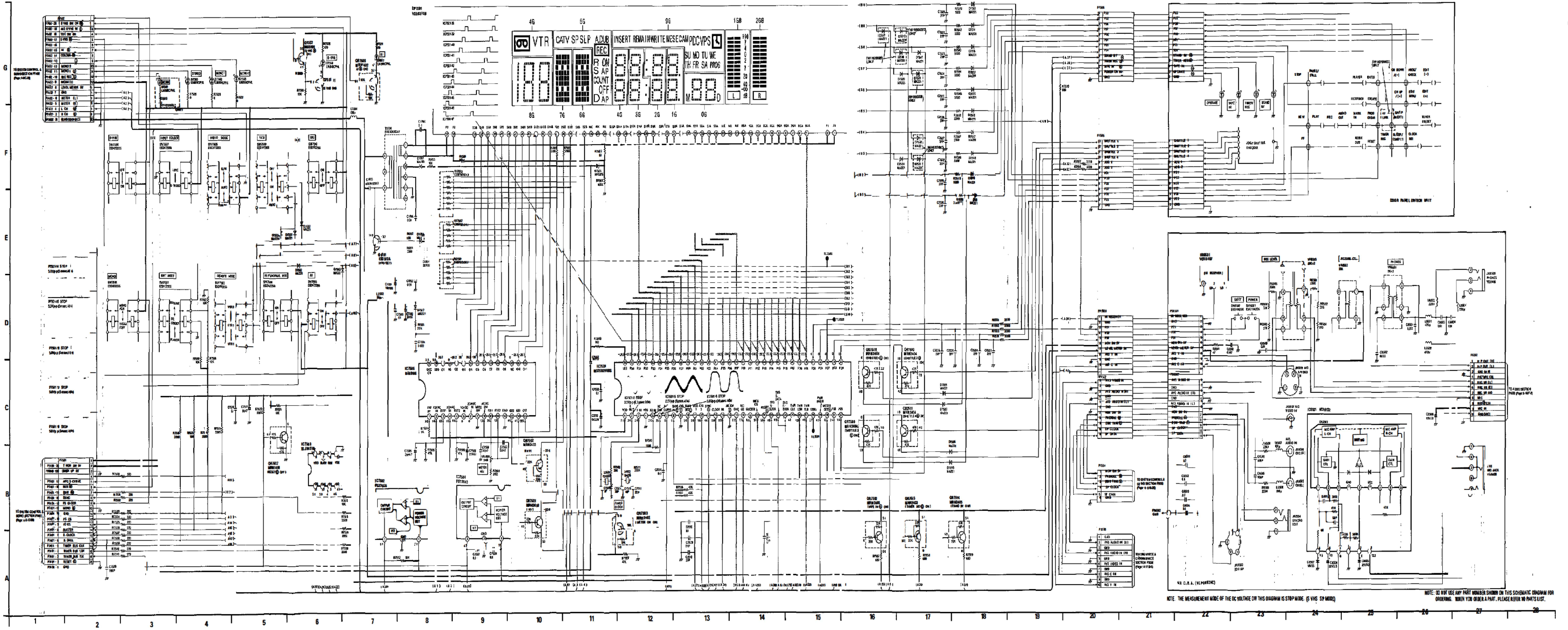

D
IC7201
4
3
2
1

TV DEMODULATOR PACK C.B.A. (VEP07680K: NV-HS1000B)


C
B
A
(1)
(3)
(2)
(4)
TV +9
1
2
3
4
5
6
7

4-27. TIMER & VR SCHEMATIC DIAGRAM

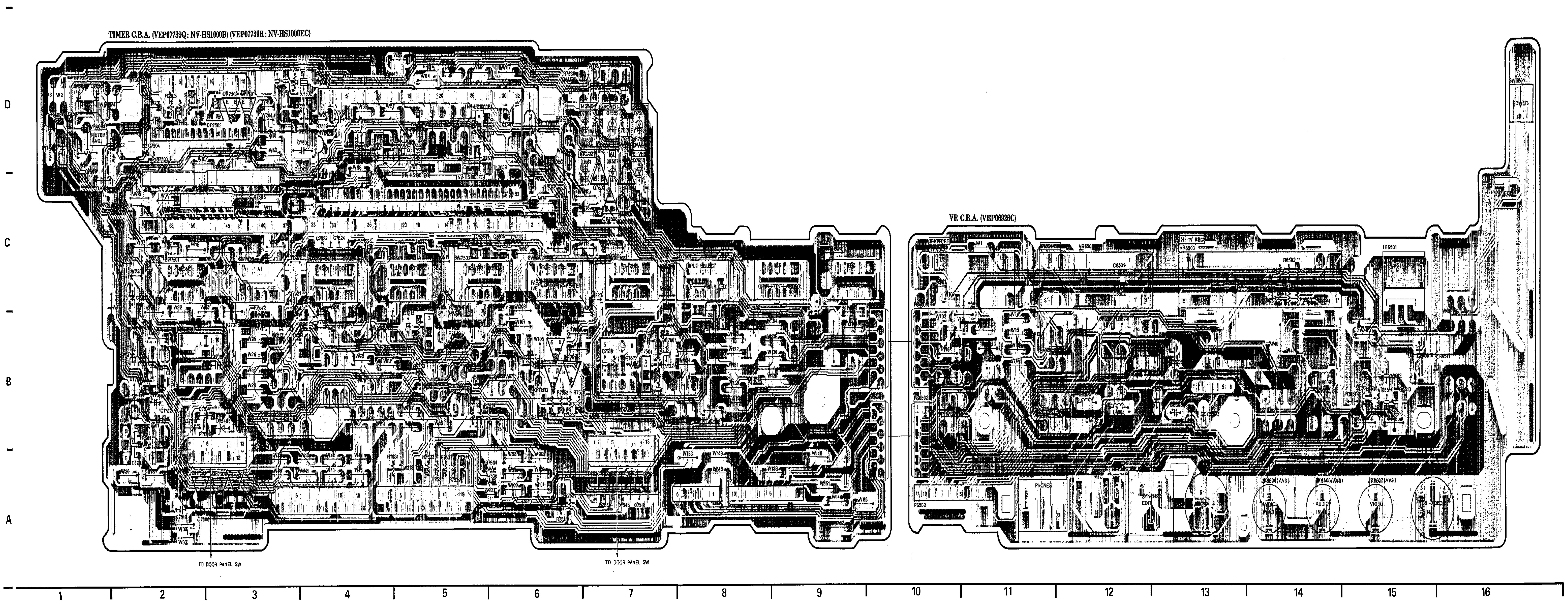
SEGMENT CONTROL SIGNAL GRID CONTROL SIGNAL TUNE CONTROL SIGNAL


G
F
E
D
C
B
A
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
VTR
CATV SP SLP
A.DUB
REC
INSERT REMAIN WRITE MESECAM PDC VPS
SU MO TU WE
TH FR SA PROG
R ON
S AP
COUNT
OFF
D AP
L
R
4G
6G
9G
15G
20G
8G
7G
6G
4G
3G
2G
1G
0G
IC7501
IC7506
IC7502
IC7504
IC7503
DOOR PANEL SWITCH UNIT
VR C.B.A. (VEP06926C)
TO LUMINANCE & CHROMINANCE SECTION P3006 (Page: 4-17:D4)
JK6303 EDIT SP
STOP
PLAY
REC
REW
FF

NOTE. THE MEASUREMENT MODE OF THE DC VOLTAGE ON THIS DIAGRAM IS STOP MODE. (S VHS SP MODE)

NOTE: DO NOT USE ANY PART NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR ORDERING. WHEN YOU ORDER A PART, PLEASE REFER TO PARTS LIST.

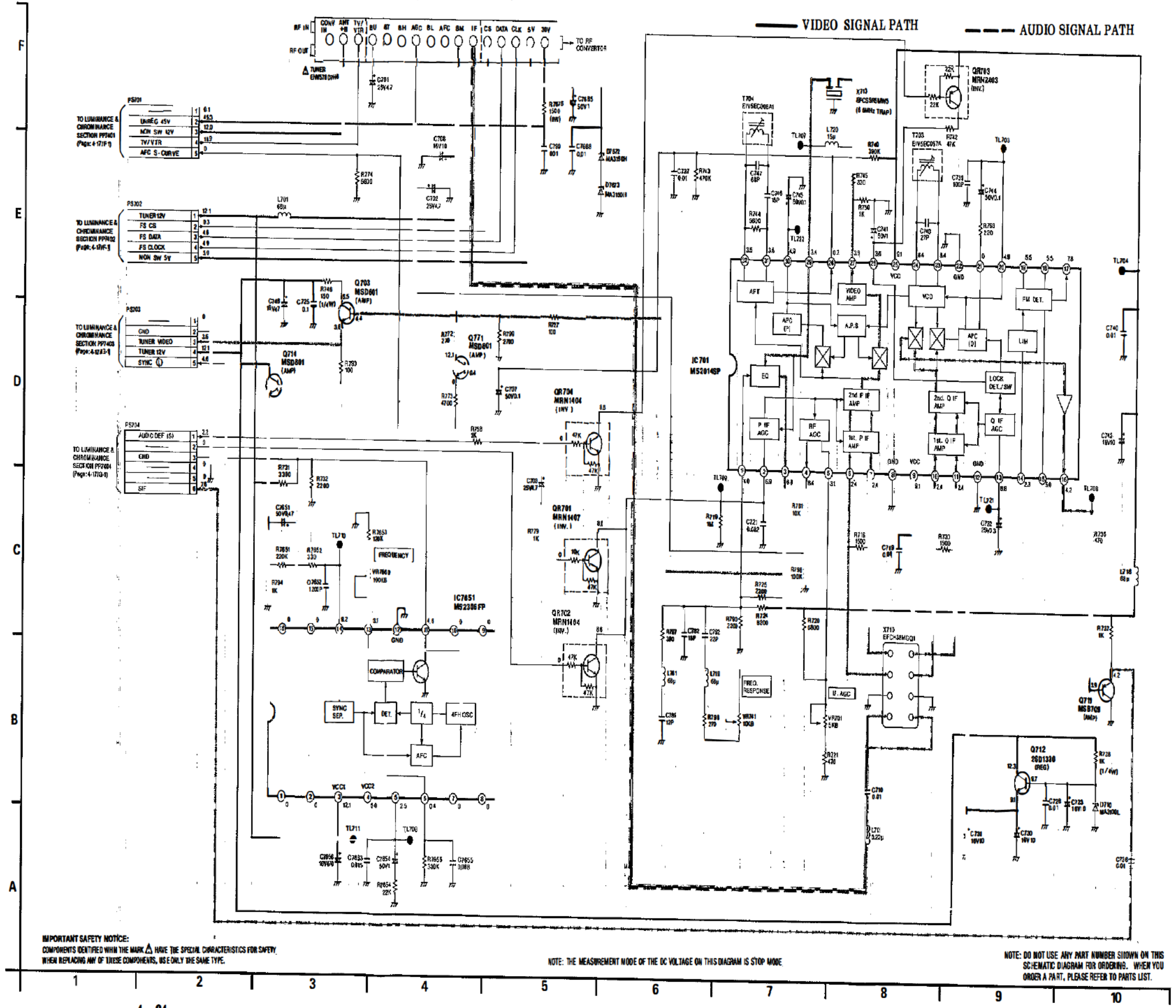
4-28. TIMER C.B.A. (VEP07739Q: NV-HS1000B) (VEP07739R: NV-HS1000EC) & VR C.B.A. (VEP06926C)


TIMER C.B.A. (VEP07739Q: NV-HS1000B) (VEP07739R: NV-HS1000EC)
VR C.B.A. (VEP06926C)
D
C
B
A
METER ADJ
INPUT SELECT
HI-FI REC
POWER
PHONES
SYNCHRO EDIT
JK6506 (AV3)
JK6506 (AV3)
JK6507 (AV3)
AUDIO
VIDEO
TO DOOR PANEL SW
TO DOOR PANEL SW
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16

TIMER C.B.A. & VR C.B.A.	
Transistor	
Q1701	B-2
Q7501	A-7
Q7502	A-7
Transistor & Resistor	
QR7501	D-3
QR7502	D-3
QR7503	D-3
QR7506	C-7
QR7507	B-7
QR7508	A-3
QR7509	A-3
QR7510	B-3
QR7511	A-2
QR7512	B-6
QR7513	B-6
QR7514	B-6
Integrated Circuit	
IC6501	B-13
IC7501	D-6
IC7502	B-5
IC7503	B-7
IC7504	B-7
IC7505	D-2
Adjustment	
C7501	D-4
VR4004	D-1
VR6501	C-12
VR6502	C-10
VR6503	C-13
Connector	
P6502	A-10
P7501	A-4
P7502	A-4
P7503	A-8
P7504	A-8
P7505	B-2
P7506	B-7
PP7501	B-10
PP7502	B-10
PS6501	B-10
PS6502	B-10

ADDRESS INFORMATION

4-29. TV DEMODULATOR PACK SCHEMATIC DIAGRAM (NV-HS1000EC)


VIDEO SIGNAL PATH
AUDIO SIGNAL PATH
TUNER
TO LUMINANCE & CHROMINANCE SECTION PP7401
TO LUMINANCE & CHROMINANCE SECTION PP7402
TO LUMINANCE & CHROMINANCE SECTION PP7403
TO LUMINANCE & CHROMINANCE SECTION PP7404
PS701
PS702
PS703
PS704
TO RF CONVERTER
Q703 MSD601 (AMP)
Q714 MSD601 (AMP)
Q771 MSD601 (AMP)
QR704 MRN1404 (INV)
QR701 MRN1407 (INV)
QR702 MRN1404 (INV)
QR703 MRN2403 (INV)
Q711 MSB709 (AMP)
Q712 2SD1330 (REG)
IC701 M52014SP
IC7651 M52336FP
AFT
APC
VIDEO AMP
A.P.S
VCO
AFC
FM DET.
LIM
LOCK DET./SW
2nd. Q IF AMP
1st. Q IF AMP
Q IF AGC
EQ
P IF AGC
RF AGC
2nd. P IF AMP
1st. P IF AMP
COMPARATOR
SYNC SEP.
DET.
AFC
4FH OSC
FREQUENCY
FREQ. RESPONSE
IF AGC
X713 EFCS6R0MQ3
X710 SFCS5R5MB
T704 EVS5EC0651
T703 EVS5EC0574
A
B
C
D
E
F
1
2
3
4
5
6
7
8
9
10

IMPORTANT SAFETY NOTICE:
COMPONENTS IDENTIFIED WITH THE MARK △ HAVE THE SPECIAL CHARACTERISTICS FOR SAFETY.
WHEN REPLACING ANY OF THESE COMPONENTS, USE ONLY THE SAME TYPE.

NOTE: THE MEASUREMENT MODE OF THE DC VOLTAGE ON THIS DIAGRAM IS STOP MODE

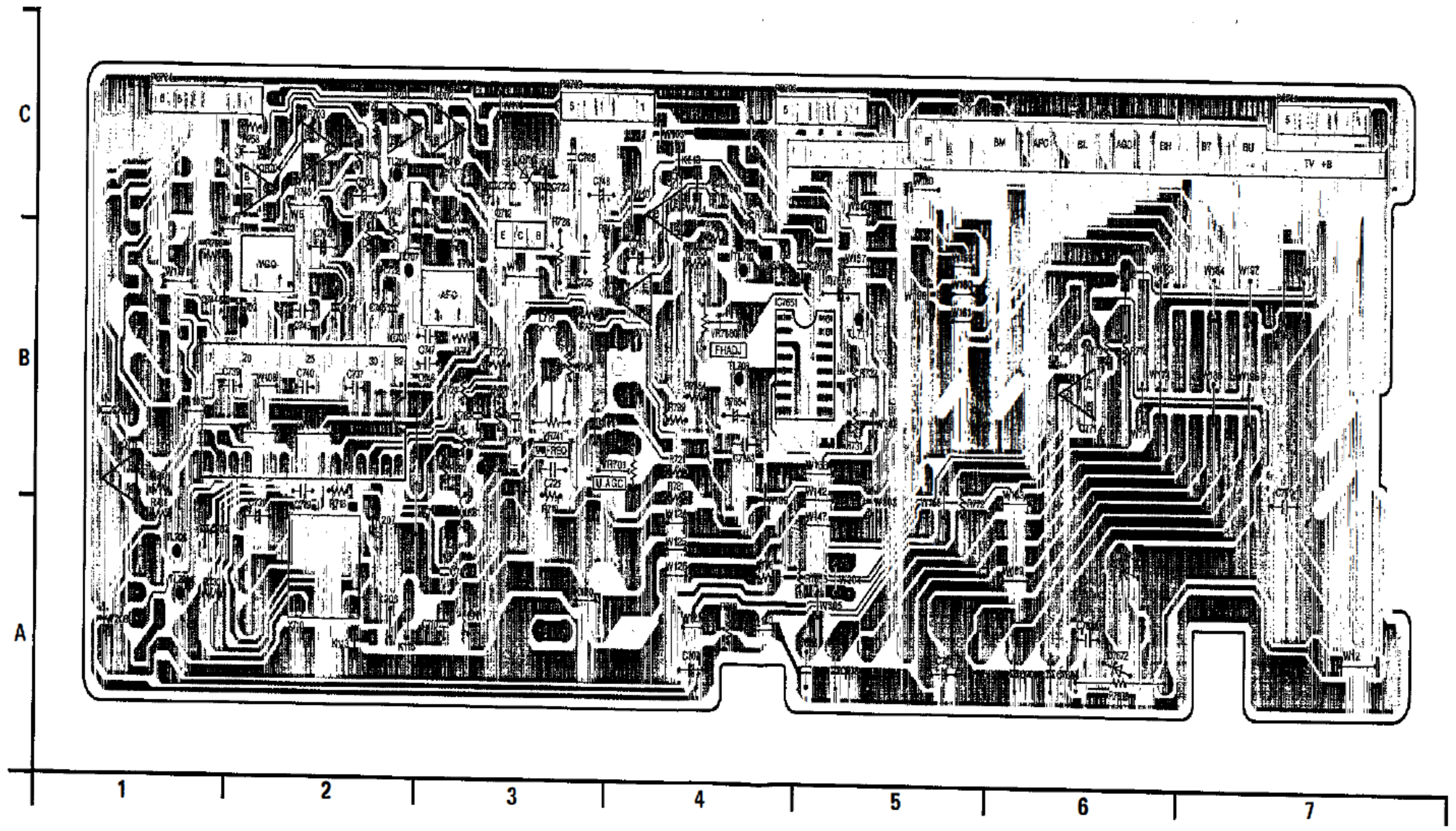
NOTE: DO NOT USE ANY PART NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR ORDERING. WHEN YOU ORDER A PART, PLEASE REFER TO PARTS LIST.

4-30. TV DEMODULATOR PACK C.B.A. (VEP07757C: NV-HS1000EC)

TV DEMODULATOR PACK C.B.A.

Transistor		Adjustment	
Q703	B-4	T703	B-2
Q711	B-1	T704	B-3
Q712	B-3	VR701	B-4
Q714	C-4	VR741	B-3
Q771	B-6	VR7660	B-4
Transistor & Resistor		**Connector**	
QR701	C-2	PS701	C-7
QR702	C-3	PS702	C-5
QR703	C-2	PS703	C-3
QR704	C-2	PS704	C-1
Integrated Circuit			
IC701	B-2		
IC7651	B-4		

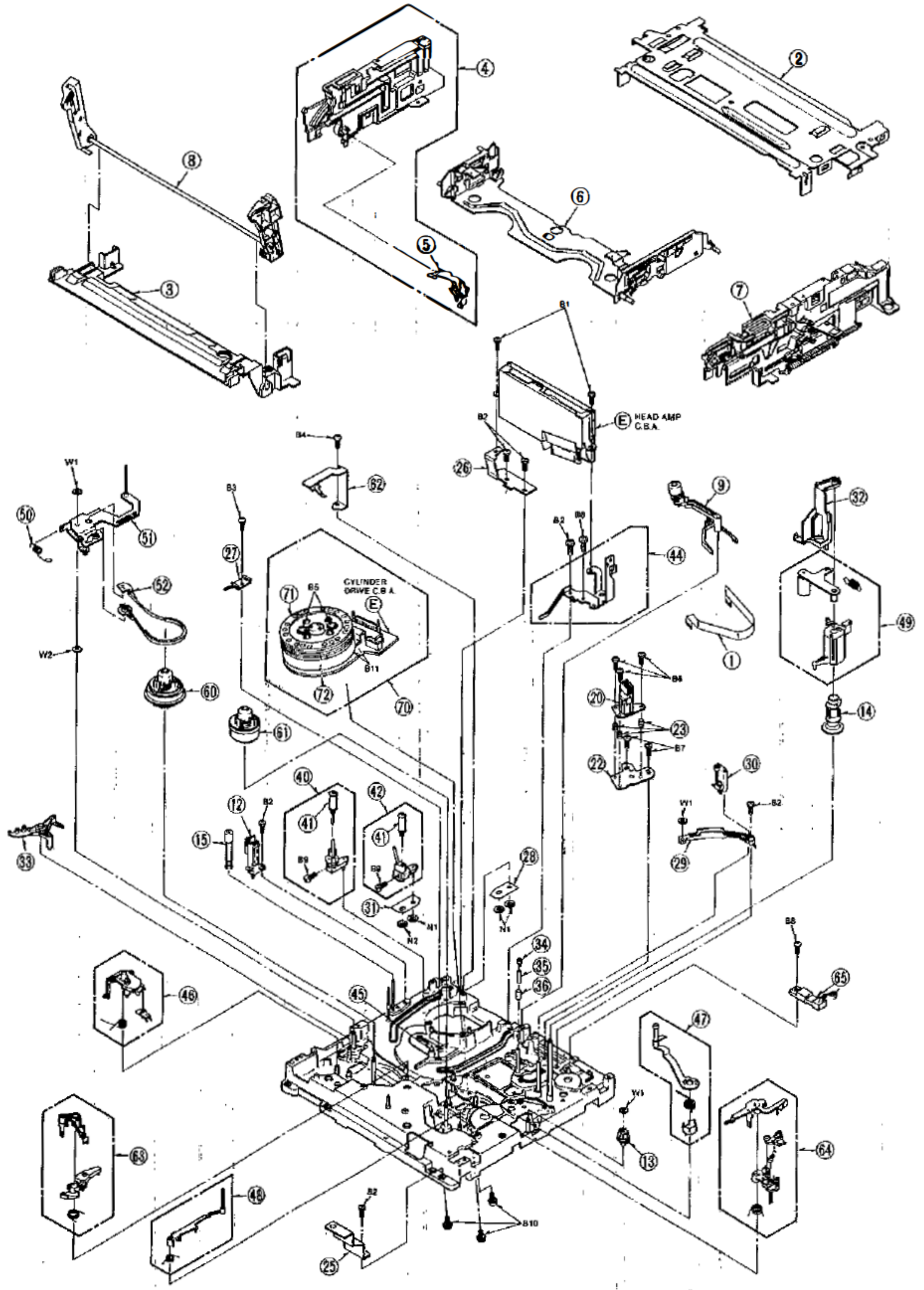
ADDRESS INFORMATION


A
B
C
1
2
3
4
5
6
7
TV +B
AFC
VIDEO
FHADJ

SECTION 5
EXPLODED VIEWS & PARTS LIST

5-1. EXPLODED VIEW & MECHANICAL REPLACEMENT PARTS LIST

❶ CHASSIS PARTS SECTION (1)



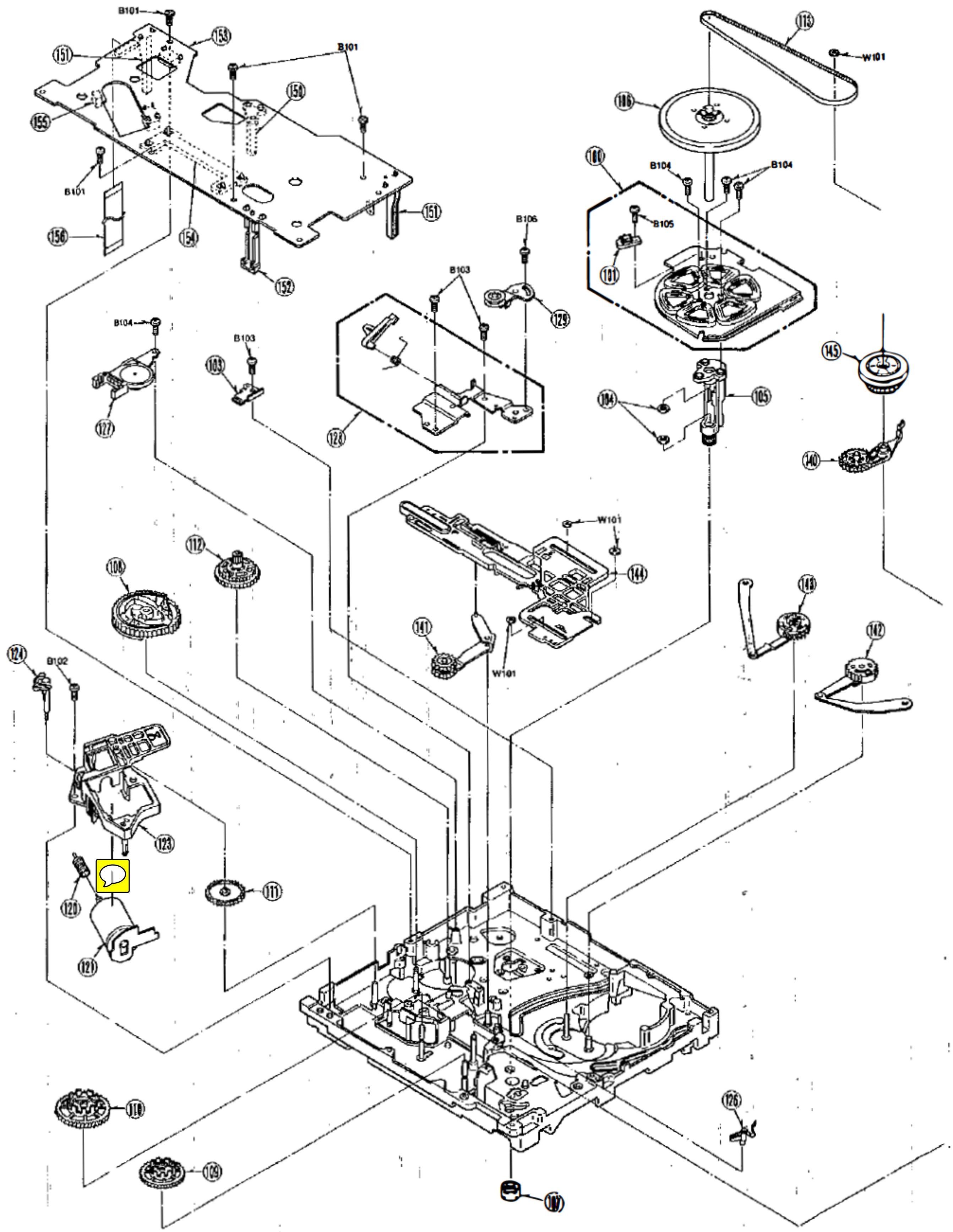
Note:1.* Be sure to make your orders of replacement parts according to this list.
2.IMPORTANT SAFETY NOTICE
Components identified with the mark ⟨!⟩ have the special characteristics for safety. When replacing any of these components,use only the same type.

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
1(1)		VWJ0617	FLEXIBLE CABLE (6P)	1	P4003-P1501
2(1)		VMA8644	TOP PLATE	1	
3(1)		VMA8787	CASSETTE GUIDE	1	
4(1)		VXA4660	SIDE PLATE (L) UNIT	1	
5(1)		VXL2250	OPENER LEVER UNIT	1	
6(1)		VXA4661	CASSETTE HOLDER PLATE UNIT	1	
7(1)		VXA4806	SIDE PLATE (R) UNIT	1	
8(1)		VXP1339	MAIN SHAFT UNIT	1	
9(1)		VXL2380	CLEANER ARM UNIT	1	
12(1)		VBS0050	FE HEAD	1	
13(1)		VDG0871	CARRIAGE CONNECTION GEAR	1	
14(1)		VDG0886	PINCH CAM GEAR	1	
15(1)		VXP1402	IMPEDANCE ROLLER UNIT	1	
20(1)		VED0205	A/C HEAD (1) UNIT	1	
22(1)		VMA8624	A/C HEAD BASE	1	
23(1)		VMB2515	A/C HEAD SPRING	3	
25(1)		VMA8761	MOUNT ANGLE	1	
26(1)		VMA8763	HEAD AMP MOUNT ANGLE (L)	1	
27(1)		VMC0917	EARTH SPRING	1	
28(1)		VMA8874	INCLIND BASE HOLDER (S)	1	
29(1)		VMD2078	P5 STOPPER BASE	1	
30(1)		VXA4927	P5 POST STOPPER	1	
31(1)		VMA8873	INCLIND BASE HOLDER (T)	1	
32(1)		VMD2101	OPENER PIECE	1	
33(1)		VML2776	TENSION SPRING ARM	1	
34(1)		VMX1544	P4 UPPER LIMITER	1	
35(1)		VMX2175	P4 SLEEVE	1	
36(1)		VMX2176	P4 LOWER LIMITER	1	
40(1)		VXA5245KIT	INCLINED BASE (S) UNIT	1	OR VXA4982KIT
41(1)		VXP1415	ROLLER POST	2	
42(1)		VXA5247KIT	INCLINED BASE (T) UNIT	1	OR VXA4984KIT
44(1)		VXA4974	HEAD AMP MOUNT ANGLE (R) U.	1	
45(1)		VMS5383	CASSETTE POSITION FIXTURE	1	
46(1)		VXL2310	REVIEW ARM UNIT	1	
47(1)		VXL2306	P5 ARM UNIT	1	
48(1)		VXL2243	TAKE UP TENSION REGULATOR ARM UNIT	1	
49(1)		VXL2246	PINCH ARM UNIT	1	
50(1)		VMB2434	TENSION SPRING	1	
51(1)		VXL2309	TENSION ARM (1) UNIT	1	
52(1)		VXZ0310	TENSION BAND UNIT	1	
60(1)		VXR0221	SUPPLY REEL TABLE UNIT	1	
61(1)		VXR0222	TAKE UP REEL TABLE UNIT	1	
62(1)		VXS0113	EARTH PLATE	1	
63(1)		VXZ0312	SUPPLY BRAKE ARM UNIT	1	
64(1)		VXZ0313	TAKE UP BRAKE ARM UNIT	1	
65(1)		2SW941PSW	POWER TRANSISTOR	1	
70(1)		VEG1133	CYLINDER UNIT	1	
71(1)		VEH0651	UPPER CYLINDER UNIT	1	
72(1)		VSC3940	CYLINDER SHIELD PLATE	1	
B1(1)		VHD0773	SCREW	2	
B2(1)		XTV26+6F	SCREW	6	
B3(1)		XTV26+4F	SCREW	1	
B4(1)		XTN3+6FFZ	SCREW	1	
B5(1)		VHD0553	SCREW	2	
B6(1)		VHD0762	SCREW	3	
B7(1)		XTV26+6FZ	SCREW	2	
B8(1)		XTV26+8F	SCREW	2	
B9(1)		XQN2+AJ4	SCREW	2	
B10(1)		VHD0342	SCREW	3	
B11(1)		XYNVD029	SCREW	2	
N1(1)		VMN0192	NUT	3	
N2(1)		VMN0193	NUT	1	
W1(1)		VMX2208	WASHER	3	
W2(1)		XWGV26D5G	WASHER	1	

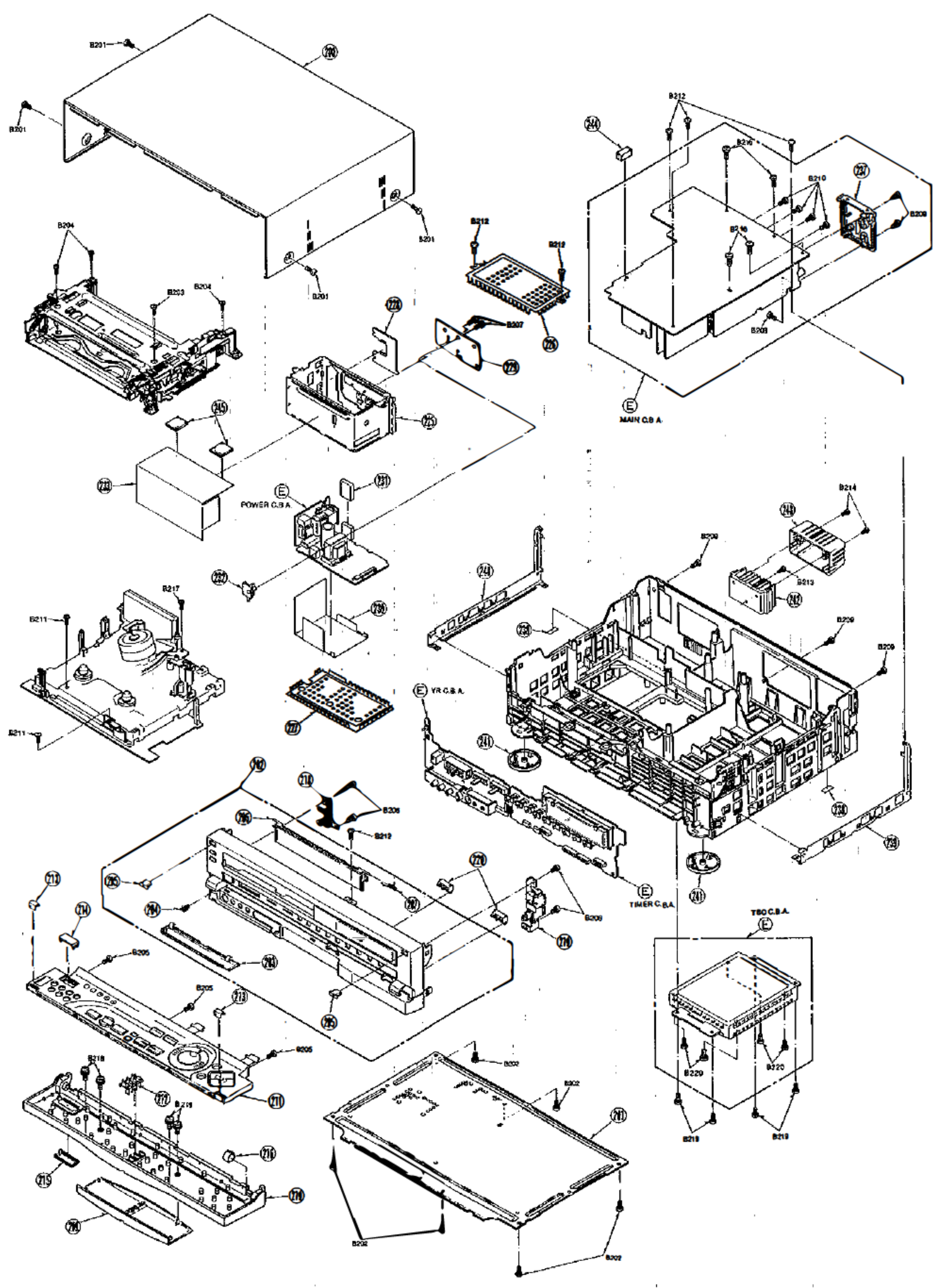
Note:1.* Be sure to make your orders of replacement parts according to this list.
2.IMPORTANT SAFETY NOTICE
Components identified with the mark ⟨!⟩ have the special characteristics for safety. When replacing any of these components,use only the same type.

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
100(2)		VEK5927	STATOR UNIT	1	
101(2)		VBK0061	FG HEAD	1	
103(2)		VMA8930	ROTOR STOPPER	1	
104(2)		VMX1927	OIL SEAL	2	
105(2)		VXD0140	HOUSING UNIT	1	
106(2)		VXP1350	ROTOR UNIT	1	
107(2)		VXQ0297	THRUST SCREW UNIT	1	
108(2)		VDG0913	MAIN CAM GEAR	1	
109(2)		VDG0956	SUPPLY REEL GEAR	1	
110(2)		VDG0957	TAKE UP REEL GEAR	1	
111(2)		VDG0868	WORM WHEEL GEAR	1	
112(2)		VDG0885	SUB CAM GEAR	1	
113(2)		VDV0235	TIMING BELT	1	
120(2)		VDG0866	WORM GEAR	1	
121(2)		VEM0427	LOADING MOTOR (1) UNIT	1	
123(2)		VMD1942	MOTOR BRACKET	1	
124(2)		VMD2153	S-VHS SW ACTUATER	1	
126(2)		VML2725	IDLER CONTROL LEVER	1	
127(2)		VSS0365	MODE SW	1	
128(2)		VXA5138	SS BRAKE BASE UNIT	1	
129(2)		VXA4799	TENSION ROLLER UNIT	1	
140(2)		VXL2378	IDLER ARM UNIT	1	
141(2)		VXL2372	DIRECT LEVER UNIT	1	
142(2)		VXL2299	SUPPLY LOADING ARM UNIT	1	
143(2)		VXL2300	TAKE UP LOADING ARM UNIT	1	
144(2)		VXL2307	MAIN LEVER UNIT	1	
145(2)		VXP1409	CENTRE CLUTCH	1	
150(2)		VMD1926	LED HOLDER	1	
151(2)		VMD1927	PHOTO TRANSISTOR HOLDER	2	
152(2)		VES0695	SAFETY TAB SW	1	
153(2)		VJB00T87	MECHANISM CONNECTION C.B.	1	ELECTRICAL PARTS ON THE C.B.A. ARE LISTED ON ELECTRICAL PARTS LIST.
154(2)		VMD2029	REEL SHAFT GUIDE	1	
155(2)		VST0176	S-VHS CASSETTE SW	1	
156(2)		VWJ0777	FLEXIBLE CABLE (14P)	1	(P6001-P1505)
B101(2)		VHD0772	SCREW	4	
B102(2)		XTV26+8F	SCREW	1	
B103(2)		XTV26+6F	SCREW	3	
B104(2)		VHD0753	SCREW	4	
B105(2)		VHD0754	SCREW	1	
B106(2)		XSB26+4FZ	SCREW	1	
W101(2)		VMX2208	WASHER	4	

❷ CHASSIS PARTS SECTION (2)



❸ CASING PARTS SECTION



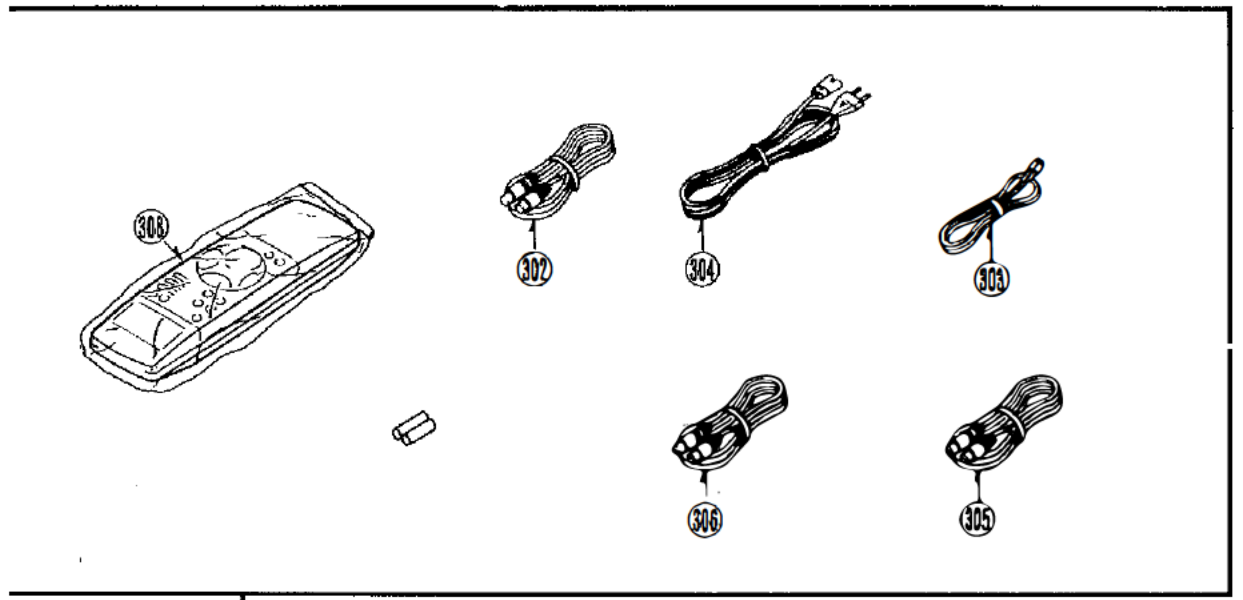
Note:1.* Be sure to make your orders of replacement parts according to this list.
2. IMPORTANT SAFETY NOTICE
Components identified with the mark ⟨!⟩ have the special characteristics for safety. When replacing any of these components, use only the same type.

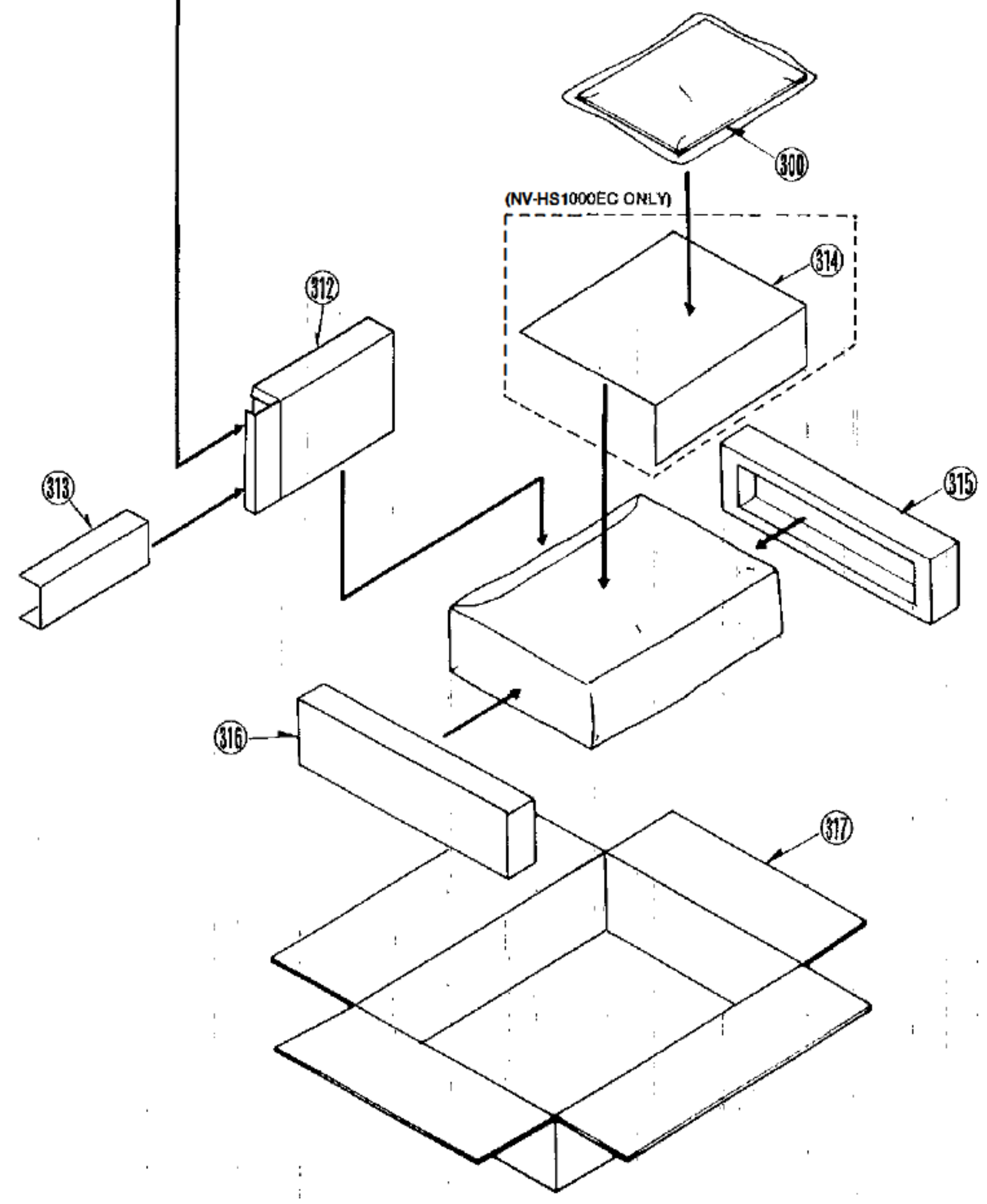
Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
200(3)	VGM1032	TOP PANEL	1	
201(3)	VKU0387	BOTTOM PLATE	1	
202(3)	VYP5634	FRONT PANEL (1) UNIT	1	NV-HS1000B
202(3)	VYP5636	FRONT PANEL (1) UNIT	1	NV-HS1000EC
203(3)	VYF2049	SUB DOOR UNIT	1	
204(3)	VGQ0550	DOOR LOCK PIECE	1	
205(3)	VGQ2216	DOOR MAGNET	2	
206(3)	VKF2118	BLINDER PANEL	1	
207(3)	VMB2521	BLINDER SPRING	1	
209(3)	VGP3771	DOOR SUB PANEL	1	NV-HS1000B
209(3)	VGP3634	DOOR SUB PANEL	1	NV-HS1000EC
210(3)	VYC0619	DOOR PANEL (1) UNIT	1	NV-HS1000B
210(3)	VYC0620	DOOR PANEL (1) UNIT	1	NV-HS1000EC
211(3)	ESU19555J	DOOR PANEL SW UNIT	1	NV-HS1000B
211(3)	ESU19555K	DOOR PANEL SW UNIT	1	NV-HS1000EC
212(3)	VGL0579	DOOR PANEL LIGHT	1	
213(3)	VMP4182	MAGNET ANGLE	2	
214(3)	VKW1333	IR WINDOW (INSIDE)	1	
215(3)	VKW1827	IR WINDOW (OUTSIDE)	1	
216(3)	VDG0954	DOOR GEAR	1	
218(3)	VXA5132	DOOR ANGLE (L) UNIT	1	
219(3)	VXA5130	DOOR ANGLE (R) UNIT	1	
220(3)	VGQ2807	FLEXIBLE CABLE HOLDER	2	
225(3)	VXA5129	POWER SHIELD PLATE (MAIN)U.	1	
226(3)	VSC2621	POWER SHIELD PLATE (TOP)	1	
227(3)	VSC2622	POWER SHIELD PLATE (BOTTOM)	1	
228(3)	VMP4183	INLET ANGLE	1	
229(3)	VSC3938	HEAT SINK (P)	1	
230(3)	VMZ2207	POWER BARRIER	1	⟨!⟩
231(3)	VMZ2208	INSULATION CAP	1	⟨!⟩
232(3)	VGQ3401	IC HOLDER	1	
233(3)	VMZ2257	SHIELD BARRIER	1	
237(3)	VJH0684	RF ANT TERMINAL PLATE	1	NV-HS1000B
237(3)	VJH0683	RF ANT TERMINAL PLATE	1	NV-HS1000EC
238(3)	VKA0122	FOOT	2	
239(3)	VMP4178	SIDE ANGLE (R)	1	
240(3)	VMP4179	SIDE ANGLE (L)	1	
241(3)	VKA0165	LEG	2	
242(3)	VSC2623	HEAT SINK (O)	1	
243(3)	VKF1150	HEAT SINK COVER	1	
244(3)	VMT0199	C.B.A. SPACER	1	
245(3)	VMT0547	POWER CUSHION	2	
B201(3)	XTW3+10TFZ	SCREW	4	
B202(3)	VHD0059	SCREW	6	
B203(3)	XTV26+10F	SCREW	1	
B204(3)	XTV26+8FR	SCREW	3	
B205(3)	XTN26+8GFZ	SCREW	3	
B206(3)	XTV3+8G	SCREW	4	
B207(3)	XPS3+8J	SCREW	2	
B208(3)	XTV3+6F	SCREW	1	
B209(3)	XTV3+12JFZ	SCREW	5	
B210(3)	XTV3+8GFZ	SCREW	4	
B211(3)	VHD0168	SCREW	2	
B212(3)	VHD0773	SCREW	6	
B213(3)	XYC3+FF12FR	SCREW	1	
B214(3)	XTV3+14FZ	SCREW	2	
B215(3)	XTV3+10J	SCREW	2	
B216(3)	XTV3+8J	SCREW	2	
B217(3)	VHD0839	SCREW	1	
B218(3)	XYC2+BG5	SCREW	4	
B219(3)	XTV3+10GR	SCREW	4	
B220(3)	XTN3+6F	SCREW	4	

Note:1.* Be sure to make your orders of replacement parts according to this list.
2. IMPORTANT SAFETY NOTICE
Components identified with the mark ⟨!⟩ have the special characteristics for safety. When replacing any of these components, use only the same type.

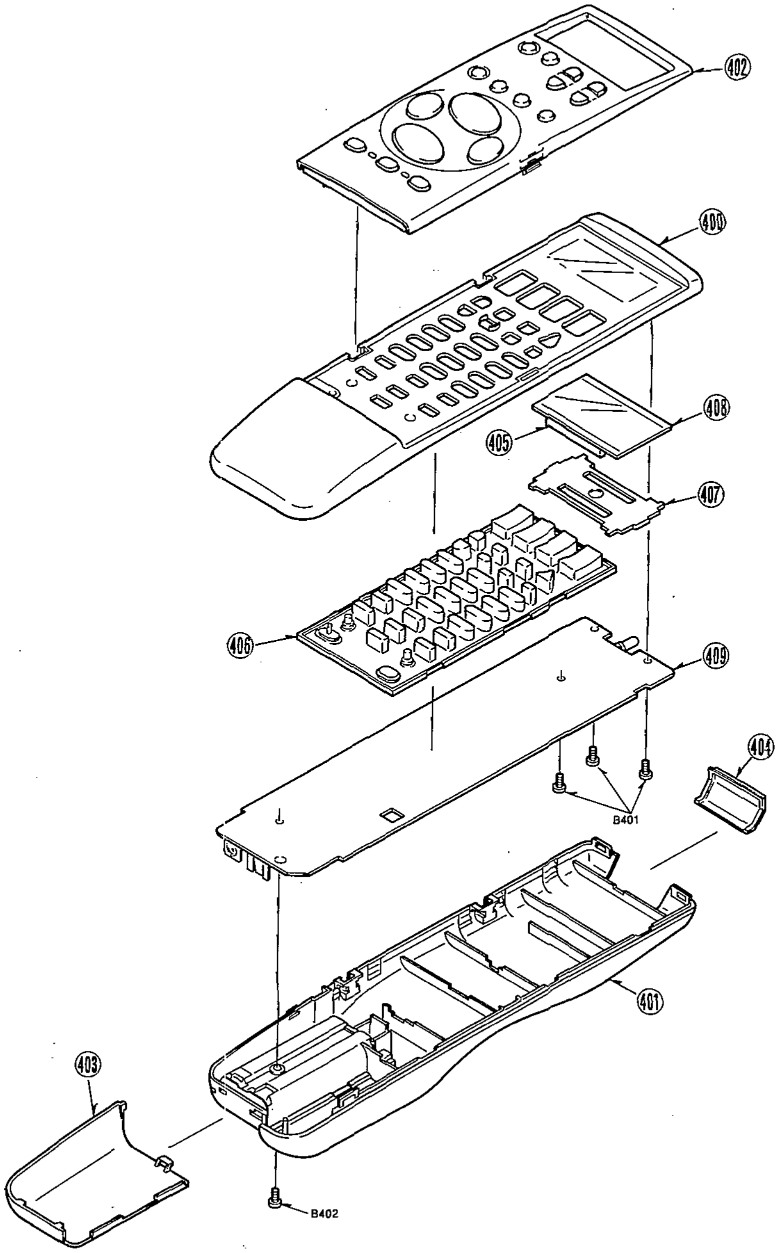
Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
300(4)	VQT5798	OPERATING INSTRUCTIONS (ENGLISH)	1	⟨!⟩NV-HS1000B
300(4)	VQT5799	OPERATING INSTRUCTIONS (ENGLISH/SPANISH)	1	⟨!⟩NV-HS1000EC
300(4)	VQT5800	OPERATING INSTRUCTIONS (FRENCH/DUTCH)	1	⟨!⟩NV-HS1000EC
300(4)	VQT5801	OPERATING INSTRUCTIONS (SWEDISH/DANISH)	1	⟨!⟩NV-HS1000EC
300(4)	VQT5802	OPERATING INSTRUCTIONS (FINNISH)	1	⟨!⟩NV-HS1000EC
302(4)	VJA0376	DIN RF CABLE	1	
303(4)	VJA0231	AUDIO CABLE	1	
304(4)	VJA0733	AC CORD	1	⟨!⟩NV-HS1000B
304(4)	VJA0664	AC CORD	1	⟨!⟩NV-HS1000EC
305(4)	VJA0787	EDIT 5P CABLE	1	
306(4)	VJA0748	S-VIDEO 4P CABLE	1	
308(4)	VEQ1565	REMOTE CONTROLLER	1	NV-HS1000B
308(4)	VEQ1562	REMOTE CONTROLLER	1	NV-HS1000EC
312(4)	VPK0834	ACCESSORIES PACKING	1	
313(4)	VPN3273	ACCESSORIES PAD	1	
314(4)	VPN3779	UPPER PAD	1	NV-HS1000EC
315(4)	VPN3763	CUSHION (R)	1	
316(4)	VPN3764	CUSHION (L)	1	
317(4)	VPG7582	PACKING	1	NV-HS1000B
317(4)	VPG7583	PACKING	1	NV-HS1000EC
		SERVICE FIXTURES & TOOLS		
	VFJ8125H3F	VHS ALIGNMENT TAPE(PAL)	1	
	VFK0335	RETAINING RING REMOVER (3mm/4mm)	1	
	VFK0329	POST ADJUSTMENT SCREWDRIVER	1	
	VFK0326	HEX WRENCH SET	1	
	VFK0132	BACK TENSION METER	1	
	VFK27	HEAD CLEANING STICK	1	
	MOR265	MORLYTONE GREASE	1	
	VFK0341	UPPER CYLINDER REMOVER	1	
	VFK0680	WHITE GREASE	1	
	VFK0851	CENTRE FIXING TOOL	1	
	VFK0330	FINE ADJUSTMENT GEAR DRIVER	1	
	VFK0678	18P EXTENSION CABLE	2	
	VFK0764	10P EXTENSION CABLE	1	
	VFK0918	17P EXTENSION CABLE	1	
	VFK0937	9P EXTENSION CABLE	1	
	VFK0938	12P EXTENSION CABLE	2	
	VFK0939	13P EXTENSION CABLE	1	
	VFK0940	14P EXTENSION CABLE	1	
	VFK0890	6P EXTENSION CABLE	1	
	VFK0944	5P EXTENSION CABLE	3	

❹ PACKING PARTS SECTION





❺ REMOTE CONTROLLER UNIT



Note:1.* Be sure to make your orders of replacement parts according to this list.
2. IMPORTANT SAFETY NOTICE
Components identified with the mark <!> have the special characteristics for safety. When replacing any of these components, use only the same type.

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
400(5)	VYK5984	TOP COVER UNIT	1	NV HS1000B
400(5)	VYK5654	TOP COVER UNIT	1	NV-HS1000EC
401(5)	VYK5446	BOTTOM COVER UNIT	1	
402(5)	VYK5631	DOOR PANEL UNIT	1	NV-HS1000B
402(5)	VYK5725	DOOR PANEL UNIT	1	NV-HS1000EC
403(5)	VKF2115	BATTERY COVER	1	
404(5)	VKW1802	IR WINDOW	1	
405(5)	VSQ0830	CONDUCTIVE RUBBER	2	
406(5)	VSP0781	RUBBER CONTACT	1	NV HS1000B
406(5)	VSP0772	RUBBER CONTACT	1	NV-HS1000EC
407(5)	VSQ0829	LCD SPACER	1	
408(5)	VSL0327	LCD	1	NV HS1000B
408(5)	VSL0319A	LCD	1	NV HS1000EC
409(5)	----------	REMOTE CONTROLLER C.B.A.	1	THE C.B.A. IS NOT SUPPLIED AS SPARE PART.

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
B401(5)	XTB2+6G	SCREW	4	
B402(5)	XTB2+8GF2	SCREW	1	

5-2. ELECTRICAL REPLACEMENT PARTS LIST

Note:1. Be sure to make your orders of replacement parts according to this list.
2. *IMPORTANT SAFETY NOTICE* : Components identified with the mark <!> have the special characteristics for safety. When replacing any of these components,use only the same type.
3. Unless otherwise specified,
All resistors are in OHMS , K=1,000 OHMS. All capacitors are in MICRO FARADS(uf),P=uuF.
4. The P.C.Board units marked width'▮'show below the main assembled parts.
5. The marking(RTL) indicates the retention time is limited for this item. After the discontinuation of this assembly in production, it will no longer be available.

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
	VEP03A37K	MAIN C.B.A. (Page:5 9)	1	(RTL)NV HS1000B INCLUDING THE TV DEMODULATOR PACK C.B.A.(VEP07680K), CAP DRIVE C.B.A. (VEP02412B), LUMINANCE & CHROMINANCE PACK C.B.A.(VEP03A61B), SUB LUMINANCE & CHROMINANCE PACK C.B.A.(VEP03A62B), INPUT/OUTPUT PACK C.B.A.(VEP03A72D), SUB AUDIO PACK C.B.A.(VEP04417B), Hi-Fi AUDIO PACK C.B.A.(VEP04447E), NICAM DECODER PACK (VEP07675A).
	VEP07680K	TV DEMODULATOR PACK C.B.A.	1	(RTL)NV-HS1000B INDLUDING THE AFC DEF C.B.A. (VEP07786A). INCLUDED IN MAIN C.B.A.(VEP03A37K).
	VEP07786A	AFC DEF C.B.A.	1	(RTL)NV HS1000B INCLUDED IN TV DEMODULATOR PACK C.B.A.(VEP07680K).
	VEP02412B	CAP DRIVE C.B.A.	1	(RTL)NV HS1000B INCLUDED IN MAIN C.B.A.(VEP03A37K).
	VEP03A61B	LUMINANCE & CHROMINANCE PACK C.B.A.	1	(RTL)NV-HS1000B INCLUDED IN MAIN C.B.A.(VEP03A37K).
	VEP03A62B	SUB LUMINANCE & CHROMINANCE PACK C.B.A.	1	(RTL)NV-HS1000B INCLUDING THE REC/RF AMP PACK C.B.A.(VEP03A90A). INCLUDED IN MAIN C.B.A.(VEP03A37K).
	VEP03A90A	REC/RF AMP PACK C.B.A.	1	(RTL)NV HS1000B INCLUDED IN MAIN C.B.A.(VEP03A37K).
	VEP03A72D	INPUT/OUTPUT PACK C.B.A.	1	(RTL)NV HS1000B INCLUDED IN MAIN C.B.A.(VEP03A37K).
	VEP04417B	SUB AUDIO PACK C.B.A.	1	(RTL)NV HS1000B INCLUDED IN MAIN C.B.A.(VEP03A37K).
	VEP04447E	Hi Fi AUDIO PACK C.B.A.	1	(RTL)NV HS1000B INCLUDED IN MAIN C.B.A.(VEP03A37K).

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
	VEP07675A	NICAM DECORDER PACK C.B.A.	1	(RTL)NV-HS1000B INCLUDED IN MAIN C.B.A.(VEP03A37K).
	VEP03A37L	MAIN C.B.A. (Page:5-20)	1	(RTL)NV HD1000EC INDLUDING THE TV DEMODULATOR PACK C.B.A.(VEP07757C), CAP DRIVE C.B.A. (VEP02412B), LUMINANCE & CHROMINANCE PACK C.B.A.(VEP03A61B), SUB AUDIO PACK C.B.A.(VEP03A62B), INPUT/OUTPUT PACK C.B.A.(VEP03A72B), SUB AUDIO PACK C.B.A.(VEP04417B), Hi-Fi AUDIO PACK C.B.A.(VEP04447E), DECORDER PACK C.B.A. (VEP07671A), NICAM DECORDER PACK C.B.A.(VEP07675D),
	VEP07757C	TV DEMODULATOR PACK C.B.A.	1	(RTL)NV-HS1000EC INDLUDED IN MAIN C.B.A.(VEP03A37L).
	VEP02412B	CAP DRIVE C.B.A.	1	(RTL)NV HS1000EC INDLUDED IN MAIN C.B.A.(VEP03A37L).
	VEP03A61B	LUMINANCE & CHROMINANCE PACK C.B.A.	1	(RTL)NV HS1000EC INDLUDED IN MAIN C.B.A.(VEP03A37L).
	VEP03A62B	SUB LUMINANCE & CHROMINANCE PACK C.B.A.	1	(RTL)NV-HS1000EC INCLUDING THE REC/RF AMP C.B.A. (VEP03A90A). INDLUDED IN MAIN C.B.A.(VEP03A37L).
	VEP03A90A	REC/RF AMP C.B.A.	1	(RTL)NV HS1000EC INCLUDED IN SUB LUMINANCE & CHROMINANCE PACK C.B.A.(VEP03A62B).
	VEP03A72B	INPUT/OUTPUT PACK C.B.A.	1	(RTL)NV HS1000EC INCLUDED IN MAIN C.B.A. (VEP03A37L).
	VEP04417B	SUB AUDIO PACK C.B.A.	1	(RTL)NV HS1000EC INCLUDED IN MAIN C.B.A.(VEP03A37L).
	VEP04447E	Hi-Fi AUDIO PACK C.B.A.	1	(RTL)NV-HS1000EC INCLUDED IN MAIN C.B.A.(VEP03A37L).
	VEP07671A	DECORDER PACK C.B.A.	1	(RTL)NV-HS1000EC INCLUDED IN MAIN C.B.A.(VEP03A37L).
	VEP07675D	NICAM DECORDER PACK C.B.A.	1	(RTL)NV HS1000EC INCLUDED IN MAIN C.B.A.(VEP03A37L).
	VEP03A53A	TBC C.B.A. (Page:5 31)	1	(RTL)
	VEP05176G	HEAD AMP C.B.A.	1	(RTL)

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
		(Page:5 33)		
	VEP06926C	VR C.B.A. (Page:5-34)	1	(RTL)
	VEP07739Q	TIMER C.B.A. (Page:5-34)	1	(RTL)NV-HS1000B
	VEP07739R	TIMER C.B.A. (Page:5-35)	1	(RTL)NV-HS1000EC
	VEP01558C	POWER C.B.A. (Page:5-36)	1	(RTL)<!>
	VEX0126	CYLINDER DRIVE C.B.A. (Page:5 37)	1	(RTL)
	----------	MECHANISM CONNECTION C.B.A. (Page:5-37)	1	NOT SUPPLIED AS C.B.A.(C.B. IS LISTED ON MECHANICAL PARTS LIST)
		MOTOR C.B.A. (Page:5-37)	1	C.B.A. IS INCLUDED IN LOADING MOTOR (1) (VEM0427)
	ENV87837H3Y	TUNER	1	<!>NV-HS1000B
	ENV578D7H6	TUNER	1	<!>NV-HS1000EC
F1101	XBA2C16TH15	FUSE	1	<!>
	■ VEP03A37K	MAIN C.B.A.		(RTL)NV-HS1000B
C301	ECUM1H820JCN	C.CAPACITOR CH 50V 82P	1	
C303	ECUM1H180JCN	C.CAPACITOR CH 50V 18P	1	
C305	ECUM1H560JCN	C.CAPACITOR CH 50V 56P	1	
C306	ECUM1H150JCN	C.CAPACITOR CH 50V 15P	1	
C307	ECUM1H470JCN	C.CAPACITOR CH 50V 47P	1	
C308	ECUM1H050CCN	C.CAPACITOR CH 50V 5P	1	
C309	ECUM1H562KBN	C.CAPACITOR CH 50V 5600P	1	
C310	ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C311	ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C312	ECEA0JKA470	E.CAPACITOR 6.3V 47U	1	
C313	ECEA0JKA101	E.CAPACITOR 6.3V 100U	1	
C314	ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C315,16	ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	2	
C317	ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C318	ECEA0JKA101	E.CAPACITOR 6.3V 100U	1	
C319	ECUM1H080DCN	C.CAPACITOR CH 50V 8P	1	
C321,22	ECUM1H680JCN	C.CAPACITOR CH 50V 68P	2	
C324	ECEA0JKA101	E.CAPACITOR 6.3V 100U	1	
C325,26	ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	2	
C329	ECQV1H334JM	P.CAPACITOR 50V 0.33U	1	
C331	ECEA1CKA470	E.CAPACITOR 16V 47U	1	
C332,33	ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	2	
C334	ECEA1CKA470	E.CAPACITOR 16V 47U	1	
C335	ECEA0JKA220	E.CAPACITOR 6.3V 220U	1	
C336	ECEA1EKN4R7	E.CAPACITOR 25V 4.7U	1	
C337	ECEA1HKN010	E.CAPACITOR 50V 1U	1	
C338	ECEA1CKA100	E.CAPACITOR 16V 10U	1	
C339	ECEA0JKA470	E.CAPACITOR 6.3V 47U	1	
C340	ECEA0JKA220	E.CAPACITOR 6.3V 22U	1	
C341	ECEA1CKA100	E.CAPACITOR 16V 10U	1	
C342	ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C343	ECEA1CKA470	E.CAPACITOR 16V 47U	1	
C344	ECEA1CKN100	E.CAPACITOR 16V 10U	1	
C345,46	ECEA1CKA100	E.CAPACITOR 16V 10U	2	
C348	ECEA1HKA010	E.CAPACITOR 50V 1U	1	
C349	ECEA1CKA101	E.CAPACITOR 16V 100U	1	
C350	ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C701	ECEA1CK100	E.CAPACITOR 16V 10U	1	
C702,03	ECEA1EK4R7	E.CAPACITOR 25V 4.7U	2	
C706	ECUY1H104ZFG	C.CAPACITOT CH 50V 0.1U	1	
C708	ECEA1CK220	E.CAPACITOR 16V 22U	1	
C710	ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C719,20	ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	2	
C721	ECQV1H823JM	P.CAPACITOR 50V 0.082U	1	
C723	ECEA1CK100	E.CAPACITOR 16V 10U	1	
C725	ECQV1H104JM	P.CAPACITOR 50V 0.1U	1	
C728	ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C730	ECEA1CK100	E.CAPACITOR 16V 10U	1	
C731	VCEA1CAC100	E.CAPACITOR 16V 10U	1	
C732	ECEA1EK3R3	E.CAPACITOR 25V 3.3U	1	
C735	ECUM1H151JCN	C.CAPACITOR CH 50V 150P	1	
C736,37	ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	2	
C739	ECUM1H101JCN	C.CAPACITOR CH 50V 100P	1	
C740	ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C741	ECEA1HK010	E.CAPACITOR 50V 1U	1	
C742	ECEA1CK100	E.CAPACITOR 16V 10U	1	
C743	ECUM1H270JSN	C.CAPACITOR CH 50V 27P	1	
C744,45	ECEA1HK0R1	E.CAPACITOR 50V 0.1U	2	
C746	ECUM1H220JCN	C.CAPACITOR CH 50V 22P	1	
C747	ECUM1H680JPN	C.CAPACITOR CH 50V 68P	1	
C748	ECEA1CK470	E.CAPACITOR 16V 47U	1	
C749	ECEA1CPK100	E.CAPACITOR 16V 10U	1	
C760	ECQV1H563JM	P.CAPACITOR 50V 0.056U	1	
C761	ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C782	ECUM1H220JCN	C.CAPACITOR CH 50V 22P	1	
C802	ECUM1H471JCN	C.CAPACITOR CH 50V 470P	1	
C803	ECEA0JKA221	E.CAPACITOR 6.3V 220U	1	
C804	ECUM1H820JCN	C.CAPACITOR CH 50V 82P	1	
C805,06	ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	2	
C808	ECUM1H680JCN	C.CAPACITOR CH 50V 68P	1	
C809	ECEA1HKA4R7	E.CAPACITOR 50V 4.7U	1	
C810	ECEA0JKA221	E.CAPACITOR 6.3V 220U	1	
C811-13	ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	3	
C814	ECEA0JKA101	E.CAPACITOR 6.3V 100U	1	
C815	ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C816	ECUM1H470JCN	C.CAPACITOR CH 50V 47P	1	
C817	ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C818	ECEA1HKA0R1	E.CAPACITOR 50V 0.1U	1	
C819	ECQB1H332JZ	F.CAPACITOR 50V 3300P	1	
C820	ECUM1H331JCN	C.CAPACITOR CH 50V 330P	1	
C821-23	ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	3	
C824	ECUM1H470JCN	C.CAPACITOR CH 50V 47P	1	
C825-27	ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	3	
C828,29	ECUM1H560JCN	C.CAPACITOR CH 50V 56P	2	
C830	ECUM1H471JCN	C.CAPACITOR CH 50V 470P	1	
C831	ECUM1H270JCN	C.CAPACITOR CH 50V 27P	1	
C832	ECQV1H154JM	P.CAPACITOR 50V 0.15U	1	
C833	ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C834	ECUM1H151JCN	C.CAPACITOR CH 50V 150P	1	
C835	ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C836	ECUM1H560JCN	C.CAPACITOR CH 50V 56P	1	
C1001	ECEA0JKA470	E.CAPACITOR 6.3V 47U	1	
C1002	ECEA1CKA101	E.CAPACITOR 16V 100U	1	
C1003	ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C2001	ECEA1CKA470	E.CAPACITOR 16V 47U	1	
C2003	ECEA0JKA470	E.CAPACITOR 6.3V 47U	1	
C2005	ECEA1CKA470	E.CAPACITOR 16V 47U	1	
C2006	ECEA1HKAR47	E.CAPACITOR 50V 0.47U	1	
C2007	ECQV1H683JM	P.CAPACITOR 50V 0.068U	1	
C2009	ECUM1H101JCN	C.CAPACITOR CH 50V 100P	1	
C2010	ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C2501-04	ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	4	
C2505	ECEA1CKA470	E.CAPACITOR 16V 47U	1	
C2506	ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C2507	ECQV1H683JM	P.CAPACITOR 50V 0.068U	1	
C2508-10	ECEA1HKA2R2	E.CAPACITOR 50V 2.2U	3	
C2511-14	VCUV1H333KBN	CAPACITOR	4	
C2515	ECEA1HKA010	E.CAPACITOR 50V 1U	1	
C2516	ECEA1HKAR22	E.CAPACITOR 50V 0.22U	1	
C2517	ECA0JM221	E.CAPACITOR 6.3V 220U	1	
C2518	ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
C2519,20	VCUV1H333KBN	CAPACITOR	2	
C2521	ECEA1CKA470	E.CAPACITOR 16V 47U	1	
C2522	ECEA1HKNR47	E.CAPACITOR 50V 0.47U	1	
C2523	ECUM1H680JCN	C.CAPACITOR CH 50V 68P	1	
C2524,25	ECUM1C105ZFN	C.CAPACITOR CH 16V 1U	2	
C2526	ECA0JM221	E.CAPACITOR 6.3V 220U	1	
C2527	ECUM1H330JCN	C.CAPACITOR CH 50V 33P	1	
C2528	ECEA1HKNR47	E.CAPACITOR 50V 0.47U	1	
C2529	ECEA1CKA101	E.CAPACITOR 16V 100U	1	
C2530	ECEA1HKN010	E.CAPACITOR 50V 1U	1	
C2531	ECUM1E224ZFN	C.CAPACITOR CH 25V 0.22U	1	
C2532	ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C2533	ECEA0JKA330	E.CAPACOTOR 6.3V 33U	1	
C2534,35	ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	2	
C3001	ECUM1H471JCN	C.CAPACITOR CH 50V 470P	1	
C3002	ECUM1H470JCN	C.CAPACITOR CH 50V 47P	1	
C3003~06	ECEA1HKA010	E.CAPACITOR 50V 1U	4	
C3007,08	ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	2	
C3009	ECEA1CKA100	E.CAPACITOR 16V 10U	1	
C3010	ECA1AM331	E.CAPACITOR 10V 330U	1	
C3011	ECEA1CKA100	E.CAPACITOR 16V 10U	1	
C3012	ECA1AM331	E.CAPACITOR 10V 330U	1	
C3013	ECA0JM331	E.CAPACITOR 6.3V 330U	1	
C3014	ECEA1HKA010	E.CAPACITOR 50V 1U	1	
C3015	ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C3016	ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C3017~19	ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	3	
C3022	ECEA0JKA470	E.CAPACITOR 6.3V 47U	1	
C3023,24	ECEA1AKA330	E.CAPACITOR 10V 33U	2	
C3027,28	ECUM1H102KBN	C.CAPACITOR CH 50V 1000P	2	
C3029	ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C3030	ECEA0JKA470	E.CAPACITOR 6.3V 47U	1	
C3031	ECUM1H102KBN	C.CAPACITOR CH 50V 1000P	1	
C3032	ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C3033	ECUM1H102KBN	C.CAPACITOR CH 50V 1000P	1	
C3301	ECUM1H100DCN	C.CAPACITOR CH 50V 10P	1	
C3302	ECUM1H820JCN	C.CAPACITOR CH 50V 82P	1	
C3304~08	ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	5	
C3309	ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C3310	ECEA0JKA470	E.CAPACITOR 6.3V 47U	1	
C3312~14	ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	3	
C3321	ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C3322	ECUM1H180JCN	C.CAPACITOR CH 50V 18P	1	
C3323	ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C3324	ECUM1H150JCN	C.CAPACITOR CH 50V 15P	1	
C3325	ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C3326	ECUM1H150JCN	C.CAPACITOR CH 50V 15P	1	
C3327.28	ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	2	
C3329	ECEA0JKA470	E.CAPACITOR 6.3V 47U	1	
C3330	ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C3336	ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C3337	ECUM1H060DCN	C.CAPACITOR CH 50V 6P	1	
C3338	ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C3339	ECUM1H330JCN	C.CAPACITOR CH 50V 33P	1	
C3340	ECUM1H101JCN	C.CAPACITOR CH 50V 100P	1	
C3341	ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C3342	ECUM1H680JCN	C.CAPACITOR CH 50V 68P	1	
C3343	ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C3344	ECUM1H560JCN	C.CAPACITOR CH 50V 56P	1	
C3345	ECUM1H391JCN	C.CAPACITOR CH 50V 390P	1	
C3346	ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C3347	ECUM1H560JCN	C.CAPACITOR CH 50V 56P	1	
C3351.52	ECUM1H181JCN	C.CAPACITOR CH 50V 180P	2	
C3353	ECUM1H180JCN	C.CAPACITOR CH 50V 18P	1	
C3354	ECUM1H220JCN	C.CAPACITOR CH 50V 22P	1	
C3372	ECEA1HKA3R3	E.CAPACITOR 50V 3.3U	1	
C3401	ECUM1H470JCN	C.CAPACITOR CH 50V 47P	1	
C3402	ECUM1H080DCN	C.CAPACITOR CH 50V 8P	1	
C3403-07	ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	5	
C3408,09	ECUM1H102KBN	C.CAPACITOR CH 50V 1000P	2	
C3421	ECUM1H472KBN	C.CAPACITOR CH 50V 4700P	1	
C3422	ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C3423	ECUM1H050CCN	C.CAPACITOR CH 50V 5P	1	
C3424	ECUM1H680JCN	C.CAPACITOR CH 50V 68P	1	
C3425	ECEA0JKA470	E.CAPACITOR 6.3V 47U	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
C3426	ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C3427	ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C3428	ECEA0JKA470	E.CAPACITOR 6.3V 47U	1	
C3429	ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C3430	ECEA0JKA330	E.CAPACOTOR 6.3V 33U	1	
C3431	ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C3443	ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C3444	ECEA0JKA470	E.CAPACITOR 6.3V 47U	1	
C3445	ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C3447	ECUM1H121JCN	C.CAPACITOR CH 50V 120P	1	
C3448	ECUM1H151JCN	C.CAPACITOR CH 50V 150P	1	
C3449	ECUM1H180JCN	C.CAPACITOR CH 50V 18P	1	
C3450,51	ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	2	
C3452	ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C3472	ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C3473	ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C3474	ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C3475-77	ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	3	
C3501	ECA0JM471	E.CAPACITOR 6.3V 470U	1	
C3502	ECRHA030E54R	V.CAPACITOR	1	
C3503	ECUM1H330JCN	C.CAPACITOR CH 50V 33P	1	
C3504	ECQB1H223JF	P.CAPACITOR 50V 0.022U	1	
C3505	ECEA1HKN010	E.CAPACITOR 50V 1U	1	
C3506	ECQB1H682JZ	F.CAPACITOR 50V 6800P	1	
C3507	ECUM1H102KBN	C.CAPACITOR CH 50V 1000P	1	
C3508	ECEA1HKA3R3	E.CAPACITOR 50V 3.3U	1	
C3509	ECUM1H122KBN	C.CAPACITOR CH 50V 1200P	1	
C3510	ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C3511	ECUM1H101JCN	C.CAPACITOR CH 50V 100P	1	
C3512	ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C3513	ECUM1H080DCN	C.CAPACITOR CH 50V 8P	1	
C3514,15	ECEA1CKA100	E.CAPACITOR 16V 10U	2	
C3516,17	ECUM1H180JCN	C.CAPACITOR CH 50V 18P	2	
C3518	ECEA1HKAR47	E.CAPACITOR 50V 0.47U	1	
C3519	ECUM1H221JCN	C.CAPACITOR CH 50V 220P	1	
C3520	ECEA1CKA330	E.CAPACITOR 16V 33U	1	
C3521	ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C3522	ECEA1CKA330	E.CAPACITOR 16V 33U	1	
C3523	ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C3524	ECEA1HKA010	E.CAPACITOR 50V 1U	1	
C3525-27	ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	3	
C3528	ECEA1HKA010	E.CAPACITOR 50V 1U	1	
C3529	ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C3530	ECUM1H330JCN	C.CAPACITOR CH 50V 33P	1	
C3531	ECUM1H150JCN	C.CAPACITOR CH 50V 15P	1	
C3532	ECUM1H330JCN	C.CAPACITOR CH 50V 33P	1	
C3533	ECEA0JKA221	E.CAPACITOR 6.3V 220U	1	
C3534	ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C3601	ECUM1H100DCN	C.CAPACITOR CH 50V 10P	1	
C3602	ECUM1H220JCN	C.CAPACITOR CH 50V 22P	1	
C3603	ECUM1H330JCN	C.CAPACITOR CH 50V 33P	1	
C3604	ECUM1H180JCN	C.CAPACITOR CH 50V 18P	1	
C3605	ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C3606	ECUM1H681JCN	C.CAPACITOR CH 50V 680P	1	
C3607	ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C3608	ECEA1CKA100	E.CAPACITOR 16V 10U	1	
C3609	ECUM1H271JCN	C.CAPACITOR CH 50V 270P	1	
C3610	ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C3611,12	ECUM1H100DCN	C.CAPACITOR CH 50V 10P	2	
C3613	ECUM1H181JCN	C.CAPACITOR CH 50V 180P	1	
C3614	ECUM1H680JCN	C.CAPACITOR CH 50V 68P	1	
C3901 05	ECEA1CKA100	E.CAPACITOR 16V 10U	5	
C3906	ECEA0JKA470	E.CAPACITOR 6.3V 47U	1	
C3907	ECEA1CKA470	E.CAPACITOR 16V 47U	1	
C3908	ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C3909,10	ECA1AM471	E.CAPACITOR 10V 470U	2	
C3911	ECUM1H332KBN	C.CAPACITOR CH 50V 3300P	1	
C3912	ECEA0JKA101	E.CAPACITOR 6.3V 100U	1	
C3913	ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C3914	ECEA1EK3R3	E.CAPACITOR 25V 3.3U	1	
C3915	ECEA1CKN100	E.CAPACITOR 16V 10U	1	
C3916	ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C3917	ECEA1CKN100	E.CAPACITOR 16V 10U	1	
C3918	ECEA1CKA470	E.CAPACITOR 16V 47U	1	
C3919	ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
C3922	ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C3923	ECEA1CKA100	E.CAPACITOR 16V 10U	1	
C3924	ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C3927	ECEA1CKA470	E.CAPACITOR 16V 47U	1	
C4001,02	ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	2	
C4003,04	ECEA1CKA100	E.CAPACITOR 16V 10U	2	
C4005	ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C4006	ECUM1C224ZFN	C.CAPACITOR CH 16V 0.22U	1	
C4007	ECEA1CPZ101	E.CAPACITOR 16V 100U	1	
C4008	ECUM1C224ZFN	C.CAPACITOR CH 16V 0.22U	1	
C4009	ECEA1CPZ101	E.CAPACITOR 16V 100U	1	
C4010	ECUM1H222KBN	C.CAPACITOR CH 50V 2200P	1	
C4011,12	ECUM1H122KBN	C.CAPACITOR CH 50V 1200P	2	
C4501	ECQB1H152JH	P.CAPACITOR 50V 1500P	1	
C4502	ECUM1C104ZFN	C.CAPACITOR CH 16V 0.1U	1	
C4503	ECUX1H152KBV	C.CAPACITOR CH 50V 1500P	1	
C4504,05	ECEA1CPZ470	E.CAPACITOR 16V 47U	2	
C4506	VCEA1CAH100	E.CAPACITOR 16V 10U	1	
C4507	ECQB1H223JA	P.CAPACITOR 50V 0.022U	1	
C4508	ECEA1EBZ4R7	E.CAPACITOR 25V 4.7U	1	
C4509	ECEA1APZ470	E.CAPACITOR 10V 47U	1	
C4510	ECQB1H103JA	P.CAPACITOR 50V 0.01U	1	
C4511	ECQB1H332JA	P.CAPACITOR 50V 3300P	1	
C4512	ECUX1H561JV	C.CAPACITOR CH 50V 560P	1	
C4513	ECUM1H681JN	C.CAPACITOR CH 50V 680P	1	
C4514	ECUM1H561JN	C.CAPACITOR CH 50V 560P	1	
C4515	VCEA1EAH4R7	E.CAPACITOR 25V 4.7U	1	
C4517	ECEA1APZ101	E.CAPACITOR 10V 100U	1	
C4518	ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C4521	ECUM1C473KBV	C.CAPACITOR CH 16V 0.047U	1	
C4522	VCEA1HAH3R3	E.CAPACITOR 50V 3.3U	1	
C4528	ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C4530	ECEA0JPK470	E.CAPACITOR 6.3V 47U	1	
C4533	ECEA1CPZ330	E.CAPACITOR 16V 33U	1	
C4537	ECUM1H102JCN	C.CAPACITOR CH 50V 1000P	1	
C4538	ECEA1HUR47	E.CAPACITOR 50V 0.47U	1	
C4539	ECUM1C224ZFN	C.CAPACITOR CH 16V 0.22U	1	
C4541	ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C4545	ECUM1H102KBN	C.CAPACITOR CH 50V 1000P	1	
C4552	ECUM1C104ZFN	C.CAPACITOR CH 16V 0.1U	1	
C4556	VCEA1CAH100	E.CAPACITOR 16V 10U	1	
C4557	ECQB1H223JA	P.CAPACITOR 50V 0.022U	1	
C4558	ECEA1EBZ4R7	E.CAPACITOR 25V 4.7U	1	
C4559	ECEA1APZ470	E.CAPACITOR 10V 47U	1	
C4560	ECQB1H103JA	P.CAPACITOR 50V 0.01U	1	
C4561	ECQB1H332JA	P.CAPACITOR 50V 3300P	1	
C4562	ECUM1H561JN	C.CAPACITOR CH 50V 560P	1	
C4563	ECUM1H681JN	C.CAPACITOR CH 50V 680P	1	
C4564	ECUM1H561JN	C.CAPACITOR CH 50V 560P	1	
C4565	VCEA1EAH4R7	E.CAPACITOR 25V 4.7U	1	
C4567	ECEA1APZ101	E.CAPACITOR 10V 100U	1	
C4568	ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C4572	VCEA1HAH3R3	E.CAPACITOR 50V 3.3U	1	
C4576	ECUM1E473KBN	C.CAPACITOR CH 25V 0.047U	1	
C4583	ECEA1CPZ330	E.CAPACITOR 16V 33U	1	
C4585,86	ECEA1APZ101	E.CAPACITOR 10V 100U	2	
C4591	ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C4592	ECUX1H152KBV	C.CAPACITOR CH 50V 1500P	1	
C4604	ECUM1H182JN	C.CAPACITOR CH 50V 1800P	1	
C4606	VCEA0JAC470	E.CAPACITOR 6.3V 47U	1	
C4611	ECQB1H182JZ	F.CAPACITOR 50V 1800P	1	
C4613	ECUM1H821JCN	C.CAPACITOR CH 50V 820P	1	
C4616	ECUX1H102ZFV	C.CAPACITOR CH 50V 1000P	1	
C4617	ECEA1CM22	E.CAPACITOR 10V 22U	1	
C4618	ECQB1H822JH	P.CAPACITOR 50V 8200P	1	
C4619	ECEA1APB100	E.CAPACITOR 10V 10U	1	
C4621	ECEA0JPK101	E.CAPACITOR 6.3V 100U	1	
C4629	ECQB1H562JZ	P.CAPACITOR 50V 5600P	1	
C4636	ECUM1H471JN	C.CAPACITOR CH 50V 470P	1	
C4638	ECQB1H822JH	P.CAPACITOR 50V 8200P	1	
C4651	ECQB1H333JA	P.CAPACITOR 50V 0.033U	1	
C4652,53	ECUM1C105ZFN	C.CAPACITOR CH 16V 1U	2	
C4701	ECCD2H181J	C.CAPACITOR 500V 180P	1	
C4702	ECQP1222JZ	P.CAPACITOR 2200P	1	
C4703	ECQB1H102JF	P.CAPACITOR 50V 1000P	1	
C4704	ECQB1H103JF	P.CAPACITOR 50V 0.01U	1	
C4705	ECEA16M33	E.CAPACITOR 16V 33U	1	
C4706	ECQV1H104JM	P.CAPACITOR 50V 0.1U	1	
C4707	ECQB1H223JF	P.CAPACITOR 50V 0.022U	1	
C4708	ECEA1CKA100	E.CAPACITOR 16V 10U	1	
C4709	ECQB1H472JF	P.CAPACITOR 50V 4700P	1	
C4710	ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C4711,12	ECEA1AKA220	E.CAPACITOR 10V 22U	2	
C4713	ECEA1HKA3R3	E.CAPACITOR 50V 3.3U	1	
C4714	ECEA1CKA101	E.CAPACITOR 16V 100U	1	
C4901,02	ECQB1H103JZ	F.CAPACITOR 50V 0.01U	2	
C4903,04	ECQB1H332JZ	F.CAPACITOR 50V 3300P	2	
C4905,06	VCEA1CAD100	CAPACITOR	2	
C4907,08	ECUM1H101JCN	C.CAPACITOR CH 50V 100P	2	
C4909,10	ECQB1H103JZ	F.CAPACITOR 50V 0.01U	2	
C4911,12	ECQB1H332JZ	F.CAPACITOR 50V 3300P	2	
C4913,14	VCEA1CAD100	CAPACITOR	2	
C4915,16	ECUM1H101JCN	C.CAPACITOR CH 50V 100P	2	
C4917,18	ECQB1H103JZ	F.CAPACITOR 50V 0.01U	2	
C4919,20	ECQB1H332JZ	F.CAPACITOR 50V 3300P	2	
C4923,24	VCEA0JAC101	E.CAPASITOR 6.3V 100U	2	
C6001	ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C6002	ECEA0JKA330	E.CAPACITOR 6.3V 33U	1	
C6003	ECEA0JKA470	E.CAPACITOR 6.3V 47U	1	
C6004	ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C6005	ECEA0JKA470	E.CAPACITOR 6.3V 47U	1	
C6006	ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C6007,08	ECUM1H180JCN	C.CAPACITOR CH 50V 18P	2	
C6009	ECUM1H472KBN	C.CAPACITOR CH 50V 4700P	1	
C6010	ECUM1H223KBN	C.CAPACITOR CH 50V 0.022U	1	
C6011	ECUM1H472KBN	C.CAPACITOR CH 50V 4700P	1	
C6012	ECUM1H392KBN	C.CAPACITOR CH 50V 3900P	1	
C6013	ECEA0JKA221	E.CAPACITOR 6.3V 220U	1	
C6014	ECQB1H103JF	P.CAPACITOR 50V 0.01U	1	
C6015	ECEA1HKA3R3	E.CAPACITOR 50V 3.3U	1	
C6016,17	ECEA1HKN3R3	E.CAPACITOR 50V 3.3U	2	
C6018	ECEA0JKA221	E.CAPACITOR 6.3V 220U	1	
C6019	ECEA0JKA470	E.CAPACITOR 6.3V 47U	1	
C6020	ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C6021	ECEA16M10	E.CAPACITOR 16V 1U	1	
C6022	ECUM1H222KBN	C.CAPACITOR CH 50V 2200P	1	
C6023	ECEA1HKA3R3	E.CAPACITOR 50V 3.3U	1	
C6024	ECEA1HKA4R7	E.CAPACITOR 50V 4.7U	1	
C6025	ECUM1H392KBN	C.CAPACITOR CH 50V 3900P	1	
C6026	ECUM1H223KBN	C.CAPACITOR CH 50V 0.022U	1	
C6027	ECUM1E104KBN	C.CAPACITOR CH 25V 0.1U	1	
C6028	ECUM1H222KBN	C.CAPACITOR CH 50V 2200P	1	
C6029	ECEA0JKA221	E.CAPACITOR 6.3V 220U	1	
C6030	EECS5R5T224N	E.CAPACITOR 5.5V 0.22U	1	
C6034	ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C6035	ECEA1CKA330	E.CAPACITOR 16V 33U	1	
C6036	ECEA0JKA330	E.CAPACITOR 6.3V 33U	1	
C6037	ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C6038	ECEA1AKA470	E.CAPACITOR 10V 47U	1	
C6040	ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C6041	ECEA0JKA101	E.CAPACITOR 6.3V 100U	1	
C6042	ECEA0JKA470	E.CAPACITOR 6.3V 47U	1	
C6043	ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C6045	ECEA0JKA470	E.CAPACITOR 6.3V 47U	1	
C6046	ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C6049	ECUM1H271JCN	C.CAPACITOR CH 50V 270P	1	
C6050,51	ECUM1H102KBN	C.CAPACITOR CH 50V 1000P	2	
C6053-56	ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	4	
C6062	ECUM1H271JCN	C.CAPACITOR CH 50V 270P	1	
C6063	ECUM1H222KBN	C.CAPACITOR CH 50V 2200P	1	
C7201	ECEA1CK100	E.CAPACITOR 16V 10U	1	
C7202	ECQV1H474JM	P.CAPACITOR 50V 0.47U	1	
C7203	ECKF1H103ZF	C.CAPACITOR 50V 0.01U	1	
C7401	ECA1CM471	E.CAPACITOR 16V 470	1	
C7402,03	ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	2	
C7404	ECEA1CKA100	E.CAPACITOR 16V 10U	1	
C7405,06	ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	2	
C7407,08	ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	2	
C7409	ECEA1CKA100	E.CAPACITOR 16V 10U	1	
C7410	ECEA1AKA101	E.CAPACITOR 10V 100U	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
C7651	ECEA1CKN100	E.CAPACITOR 16V 10U	1	
C7653	ECUM1H561JCN	C.CAPACITOR CH 50V 560P	1	
C7654	ECQB1H103JH	P.CAPACITOR 50V 0.01U	1	
C7655,56	ECEA1HK010	E.CAPACITOR 50V 1U	2	
C7657	ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C7658	ECQP1H562JZ	P.CAPACITOR 50V 5600P	1	
C7659	ECQB1H272JH	P.CAPACITOR 50V 2700P	1	
C7661	ECQV1H104JM	P.CAPACITOR 50V 0.1U	1	
C7662	ECQV1H683JM	P.CAPACITOR 50V 0.068U	1	
C7663	ECQV1H823JM	P.CAPACITOR 50V 0.082U	1	
C7664	ECQB1H273JH	P.CAPACITOR 50V 0.027U	1	
C7665,66	ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	2	
C7667	ECEA1HKA100	E.CAPACITOR 50V 10U	1	
C7670	ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C7675	ECEA1HKN010	E.CAPACITOR 50V 1U	1	
C7676,77	ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	2	
C7680	ECEA1HK010	E.CAPACITOR 50V 1U	1	
C7681,82	ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	2	
C7901-03	ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	3	
C7904	ECEA1CK470	E.CAPACITOR 16V 47U	1	
C7905	ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	1	
C7906	ECEA1CK470	E.CAPACITOR 16V 47U	1	
C7907	ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	1	
C7908	ECQV1H104JM	P.CAPACITOR 50V 0.1U	1	
C7909	ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	1	
C7910	ECEA1CK100	E.CAPACITOR 16V 10U	1	
C7911-13	ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	3	
C7914	ECEA0JK470	E.CAPACITOR 6.3V 47U	1	
C7915	ECUX1H100DCV	C.CAPACITOR CH 50V 10P	1	
C7916	ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	1	
C7917	ECEA0JK470	E.CAPACITOR 6.3V 47U	1	
C7918	ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	1	
C7919	ECEA0JK470	E.CAPACITOR 6.3V 47U	1	
C7920	ECEA1CK100	E.CAPACITOR 16V 10U	1	
C7921	ECQB1H102JH	P.CAPACITOR 50V 1000P	1	
C7922	ECQB1H272JH	P.CAPACITOR 50V 2700P	1	
C7923	ECUX1H151JCV	C.CAPACITOR CH 50V 150P	1	
C7924	ECEA1CKN100	E.CAPACITOR 16V 10U	1	
C7925	ECUX1H561JCV	C.CAPACITOR CH 50V 560P	1	
C7926	ECEA1CK100	E.CAPACITOR 16V 10U	1	
C7927	ECQB1H102JH	P.CAPACITOR 50V 1000P	1	
C7928	ECQB1H272JH	P.CAPACITOR 50V 2700P	1	
C7929	ECUX1H151JCV	C.CAPACITOR CH 50V 150P	1	
C7930	ECEA1CKN100	E.CAPACITOR 16V 10U	1	
C7931	ECUX1H561JCV	C.CAPACITOR CH 50V 560P	1	
C7932,33	ECEA1CKN100	E.CAPACITOR 16V 10U	2	
C7934	ECUX1H220JCV	C.CAPACITOR CH 50V 22P	1	
C7935	ECUX1H470JCV	C.CAPACITOR CH 50V 47P	1	
C7937	ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	1	
C7938	ECEA1HKR47	E.CAPACITOR 50V 0.47U	1	
C7939,40	ECEA1HKN0R1	E.CAPACITOR 50V 0.1U	2	
C7941	ECEA1HKR47	E.CAPACITOR 50V 0.47U	1	
C7942	ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	1	
C7943	ECUX1H100DCV	C.CAPACITOR CH 50V 10P	1	
C7945	ECUX1H101JCV	C.CAPACITOR CH 50V 100P	1	
C7946	ECUX1H220JCV	C.CAPACITOR CH 50V 22P	1	
C7947	ECEA1HKR47	E.CAPACITOR 50V 0.47U	1	
C7948	ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	1	
C7949	ECEA0JK330	E.CAPACITOR 6.3V 33U	1	
C7950-53	ECEA1CKN100	E.CAPACITOR 16V 10U	4	
C7954	ECEA1CK470	E.CAPACITOR 16V 47U	1	
C7955-58	ECEA1CK100	E.CAPACITOR 16V 10U	4	
C7960	ECEA1CK100	E.CAPACITOR 16V 10U	1	
C7961	ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	1	
C7963	ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	1	
C7964	ECEA1CK100	E.CAPACITOR 16V 10U	1	
C7965,66	ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	2	
C7967	ECEA1CK100	E.CAPACITOR 16V 10U	1	
D301	1SS283	DIODE	1	
D303	MA151WK	DIODE	1	
D305	1SS254	DIODE	1	
D306	MA723VT	DIODE	1	
D307	1SS254	DIODE	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
D308,09	MA151WK	DIODE	2	
D710	MA3100L	DIODE	1	
D771	MA151WK	DIODE	1	
D772	MA165VT	DIODE	1	
D801-07	1SS254	DIODE	7	
D808	MA151WK	DIODE	1	
D1002	1SS254	DIODE	1	
D2001-05	1SS254	DIODE	5	
D2501-08	1SS254	DIODE	8	
D2510	1SS254	DIODE	1	
D3002	MA28W-A	DIODE	1	
D3003	1SS254	DIODE	1	
D3301	1SS254	DIODE	1	
D3302	MA151K	DIODE	1	
D3304	MA151K	DIODE	1	
D3403	MA723VT	DIODE	1	
D3405	MA151WA	DIODE	1	
D3408	1SS254	DIODE	1	
D3501	1SS254	DIODE	1	
D3502	MA153	DIODE	1	
D3504	MA151WK	DIODE	1	
D3901	1SS254	DIODE	1	
D3902	MA4130L	DIODE	1	
D3903	1SS254	DIODE	1	
D3904	MA151WK	DIODE	1	
D3906	MA151WA	DIODE	1	
D3908,09	1SS254	DIODE	2	
D4003	MA723VT	DIODE	1	
D4004	1SS254	DIODE	1	
D4501,02	MA151H	DIODE	2	
D4503	MA151K	DIODE	1	
D4504	MA151M	DIODE	1	
D4601,02	MA151K	DIODE	2	
D4701-03	1SS254	DIODE	3	
D6001	1SS254	DIODE	1	
D6002	MA723VT	DIODE	1	
D6003	1SS254	DIODE	1	
D6005	MA151WK	DIODE	1	
D6006	MA151WA	DIODE	1	
D6007	MA151WK	DIODE	1	
D6008	MA151WA	DIODE	1	
D6009	11EQS04	DIODE	1	
D6011,12	11EQS04	DIODE	2	
D6013	MA723VT	DIODE	1	
D6014	1SS254	DIODE	1	
D6015	MA723VT	DIODE	1	
D7202-04	1SS254	DIODE	3	
D7401	MA723VT	DIODE	1	
D7601	MA151WK	DIODE	1	
D7602	MA3082M	DIODE	1	
D7901,02	MA141WK	DIODE	2	
D7904	MA141K	DIODE	1	
D7905	MA141WA	DIODE	1	
D7906	MA141WK	DIODE	1	
D7907	MA141K	DIODE	1	
DL801	EFDUN124A13N	DELAY LINE	1	
DL802	EFDVR645A45A	DELAY LINE	1	
DL803	VLD0147	DELAY LINE	1	
FL301	ELB4M022	FILTER	1	
FL302	VLF0639	FILTER	1	
FL801	VLF1079	FILTER	1	
FL3601	ELB4R031	FILTER	1	
FL3901	VLF0766	FILTER	1	
FL3902	VLF0765	FILTER	1	
FL4501	VLF0947M	FILTER	1	
FL7901	VLF0702	FILTER	1	
FL7902	ELKAW103EB	FILTER	1	
FL7903	ELKAW101GB	FILTER	1	
FL7904,05	ELKAW103EB	FILTER	2	
FL7907-11	ELKAW103EB	FILTER	5	
FL7914,15	ELKAW101GB	COIL 100UH	2	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
FL7916	VLF0633	COIL	1	
IC301	VEFH20B	HIC	1	
IC302	MN3859S	IC	1	
IC303	AN1358S	IC	1	
IC701	M52014SP	IC	1	
IC801	VCR0380	IC	1	
IC802	M52352FP	IC	1	
IC2001	AN3727S	IC	1	
IC2002	UPD4053BG	IC	1	
IC2501	BA6219B	IC	1	
IC2502	LM358PS	IC	1	
IC2503	XRA6439S	IC	1	
IC2504	LM358PS	IC	1	
IC2505	LM393P	IC	1	
IC3001	AN3581S	IC	1	
IC3002	M52055FP	IC	1	
IC3301	M52083FP	IC	1	
IC3401	NJM2233BMA	IC	1	
IC3403	MN15520ZVZAM	IC	1	
IC3404	MN1280S	IC	1	
IC3405	UPD4066BG	IC	1	
IC3501	LC74760	IC	1	
IC3502	M52055FP	IC	1	
IC3503	NJM2246DA	IC	1	
IC3504	NJM2233BMA	IC	1	
IC3601	AN6308S	IC	1	
IC3901	M52475AP	IC	1	
IC3902	AN3916	IC	1	
IC3904	AN1393S	IC	1	
IC4001	NJM4565DD	IC	1	
IC4501	XLH7773KS	IC	1	
IC4601	BA7755AF	IC	1	
IC4701	AN1358S	IC	1	
IC4702	MN4066BS	IC	1	
IC4901	LA7155M	IC	1	
IC6001	MN6755320H2D	IC	1	
IC6002	M38024V1BK	IC	1	
IC6003	MN1280S	IC	1	
IC6005	UPD4052BG	IC	1	
IC6007	M6M80041P	IC	1	
IC6008	TL431CLP	IC	1	
IC7201	UPD4011BC	IC	1	
IC7401	M66006FP	IC	1	
IC7651	AN5421	IC	1	
IC7652	AN5043	IC	1	
IC7653	MN4066BS	IC	1	
IC7901	TB1204F	IC	1	
IC7902	TA2009F	IC	1	
IC7903	M5238FP	IC	1	
J3901,02	VJS1470	AV 21PIN SCART JACK	2	
L302	VLQ0188J180	COIL 18UH	1	
L304	VLQ0188J270	COIL 27UH	1	
L305	VLQ0188J101	COIL 100UH	1	
L306	VLQ0188J390	COIL 39UH	1	
L309-11	VLQ0188J330	COIL 33UH	3	
L312	VLQ0407101K	COIL 100UH	1	
L701	ELESQ680KA	COIL 68UH	1	
L713	VLQ0213K1R2	COIL 1.2UH	1	
L714	ELQT1R2KB	COIL 1.2UH	1	
L718	ELESQ680KA	COIL 68UH	1	
L719	ELESQ8R2KA	COIL 8.2UH	1	
L801,02	ELESE681KA	COIL 680UH	2	
L803	ELESE331KA	COIL H	1	
L804	VLQ0407101K	COIL 100UH	1	
L806	VLQ0407101K	COIL 100UH	1	
L807,08	VLQ0188J150	COIL 15UH	2	
L809	VLQ0188J330	COIL 33UH	1	
L810	VLQ0188J150	COIL 15UH	1	
L811	VLQ0188J151	COIL 150UH	1	
L812	VLQ0188J270	COIL 27UH	1	
L813,14	VLQ0188J150	COIL 15UH	2	
L2001	VLQ0569	COIL	1	
L2002	ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
L2501	VLP0074	COIL	1	
L2502	ELESE330KA	COIL	1	
L2503	ELESE102KA	COIL 1000UH	1	
L3001-03	VLQ0188J330	COIL 33UH	3	
L3004	VLQ0398	COIL	1	
L3005-08	VLQ0556	COIL	4	
L3301	VLQ0188J150	COIL 15UH	1	
L3304	VLQ0188J330	COIL 33UH	1	
L3306	VLQ0188J390	COIL 39UH	1	
L3307	VLQ0188J120	COIL 12UH	1	
L3308	VLQ0188J330	COIL 33UH	1	
L3309	VLQ0188J181	COIL 180UH	1	
L3310	VLQ0188J270	COIL 27UH	1	
L3313	ELESE681KA	COIL 680UH	1	
L3315,16	VLQ0188J5R6	COIL 5.6UH	2	
L3318	VLQ0188J330	COIL 33UH	1	
L3323	VLQ0188J330	COIL 33UH	1	
L3401	VLQ0188J150	COIL 15UH	1	
L3404	VLQ0188J220	COIL 22UH	1	
L3405	VLQ0188J330	COIL 33UH	1	
L3412	VLQ0188J330	COIL 33UH	1	
L3415	VLQ0188J120	COIL 12UH	1	
L3501	VLQ0188J330	COIL 33UH	1	
L3502	VLQ0188J5R6	COIL 5.6UH	1	
L3503	VLQ0188J100	COIL 10UH	1	
L3504	VLQ0188J390	COIL 39UH	1	
L3505	VLQ0188J820	COIL 82UH	1	
L3508	VLQ0188J330	COIL 33UH	1	
L3601	VLQEL05S120K	COIL 12UH	1	
L3602,03	VLQEL05S101K	COIL 100UH	2	
L3604	VLQEL05S151K	COIL H	1	
L3605	VLQEL05S820K	COIL 82UH	1	
L3901-04	ELESE101KA	COIL 100UH	4	
L4001,02	ELESE101KA	COIL 100UH	2	
L4501,02	ELESQ101KA	COIL 100UH	2	
L4601	VLQEL07F153J	COIL 15MH	1	
L4701	ELESE471KA	COIL	1	
L4702	ELESE101KA	COIL 100UH	1	
L4901,02	ELESE102KA	COIL 1000UH	2	
L4903,04	ELESE101KA	COIL 100UH	2	
L4905,06	ELESE102KA	COIL 1000UH	2	
L4907,08	ELESE101KA	COIL 100UH	2	
L4909,10	ELESE102KA	COIL 1000UH	2	
L6001	VLP0083	COIL	1	
L6002	ELESE101KA	COIL 100UH	1	
L6003	VLP0083	COIL	1	
L6007,08	VLP0083	COIL	2	
L6009	ELESE101KA	COIL 100UH	1	
L7401-03	VLQ0188J330	COIL 33UH	3	
L7404	VLQ0540J330	COIL 33UH	1	
L7405	VLQ0188J1R0	COIL 1UH	1	
L7901,02	VLP0083	COIL	2	
P1001	VJP2593	CONNECTOR (MALE)	1	
P1001	VJS2593	CONNECTOR (FEMALE)	1	
P1002	VJP1142	CONNECTOR (MALE) 3P	1	
P1002	VJS1142	CONNECTOR (FEMALE)	1	
P1102	VJS1932	CONNECTOR (FEMALE)	1	
P1103	VJS1142	CONNECTOR (FEMALE)	1	
P1509	VJS1141	CONNECTOR (FEMALE)	1	
P2001	VJP1232T	CONNECTOR (MALE) 5P	1	
P2001	VJS1738T	CONNECTOR (FEMALE)	1	
P2003	VJP3502	CONNECTOR (MALE)	1	
P2003	VJS3482	CONNECTOR (FEMALE)	1	
P2004	VJS3537A015G	CONNECTOR (FEMALE) 15P	1	
P2902	VJS1738T	CONNECTOR (FEMALE)	1	
P3001	VJS3537A020G	CONNECTOR (FEMALE) 20P	1	
P3002	VJP3233A010	CONNECTOR (MALE) 10P	1	
P3002	VJS33662010	CONNECTOR (FEMALE) 10P	1	
P3003	VJF0171	CONNECTOR	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
P3003	VJP1393T	CONNECTOR (MALE) 13P	1	
P4001	VJS2331	CONNECTOR (FEMALE)	1	
P4002	VJP1238T	CONNECTOR (MALE) 11P	1	
P4002	VJS1744T	CONNECTOR (FEMALE)	1	
P4003	VJP1230T	CONNECTOR (MALE) 3P	1	
P4003	VJS1230	CONNECTOR (FEMALE)	1	
P6001	VJS3537A014G	CONNECTOR (FEMALE) 14P	1	
P6003	VJP1233T	CONNECTOR (MALE) 6P	1	
P6003	VJS1739T	CONNECTOR (FEMALE)	1	
P6004	VJP1235T	CONNECTOR (MALE) 8P	1	
P6004	VJS1741T	CONNECTOR (FEMALE)	1	
P6502	VJS1744T	CONNECTOR (FEMALE)	1	
P7201	VJP1245T	CONNECTOR (MALE) 5P	1	
P7201	VJS1232T	CONNECTOR (FEMALE)	1	
P7401,02	VJS3537A020G	CONNECTOR (FEMALE) 20P	2	
P7503	VJS3366Z010	CONNECTOR (FEMALE) 10P	1	
P7504	VJS1739T	CONNECTOR (FEMALE)	1	
P9001	VJF0171	CONNECTOR	1	
P9002	VJS1741T	CONNECTOR (FEMALE)	1	
PK7901,02	VJR0477	PACK PIN	2	
PP2001	VJP3042A012W	CONNECTOR (MALE) 12P	1	
PP2002	VJP3042A010W	CONNECTOR (MALE) 10P	1	
PP3001	VJP3042A009W	CONNECTOR (MALE) 9P	1	
PP3002	VJP3042A012W	CONNECTOR (MALE) 12P	1	
PP3003	VJP3042A013W	CONNECTOR (MALE) 13P	1	
PP3011,12	VJP3042A018W	CONNECTOR (MALE) 18P	2	
PP3013	VJP3042A014W	CONNECTOR (MALE) 14P	1	
PP3021-24	VJP3043A012W	CONNECTOR (MALE) 12P	4	
PP3301	VJP3042A011W	CONNECTOR (MALE) 11P	1	
PP4001-03	VJP3186A018	CONNECTOR (MALE) 18P	3	
PP4501	VJP3042A017W	CONNECTOR (MALE) 17P	1	
PP7401-03	VJP3043A005W	CONNECTOR (MALE) 5P	3	
PP7404	VJP3043A006W	CONNECTOR (MALE) 6P	1	
PP7405	VJP3043A004W	CONNECTOR (MALE) 4P	1	
PP7406	VJP3043A010W	CONNECTOR (MALE) 10P	1	
PS301	VJS3042B009W	CONNECTOR (FEMALE) 9P	1	
PS302	VJS3042B012W	CONNECTOR (FEMALE) 12P	1	
PS303	VJS3042B013W	CONNECTOR (FEMALE) 13P	1	
PS701-03	VJS3043B005W	CONNECTOR (FEMALE) 5P	3	
PS704	VJS3043B006W	CONNECTOR (FEMALE) 6P	1	
PS2001	VJS3042B012W	CONNECTOR (FEMALE) 12P	1	
PS2002	VJS3042B010W	CONNECTOR (FEMALE) 10P	1	
PS3021-24	VJS3043B012W	CONNECTOR (FEMALE) 12P	4	
PS3302,03	VJS3042B018W	CONNECTOR (FEMALE) 18P	2	
PS3501	VJS3042F014W	CONNECTOR (FEMALE) 14P	1	
PS3601	VJS3042B011W	CONNECTOR (FEMALE) 11P	1	
PS4001-03	VJS3186B018	CONNECTOR (FEMALE) 18P	3	
PS4701	VJS3042B017W	CONNECTOR (FEMALE) 17P	1	
Q301	MSC2295	TRANSISTOR	1	
Q302	MSB709	TRANSISTOR	1	
Q303,04	MSC2295	TRANSISTOR	2	
Q305	MSD601	TRANSISTOR	1	
Q306	MSC2295	TRANSISTOR	1	
Q307,08	MSB709	TRANSISTOR	2	
Q703	MSD601-S	TRANSISTOR	1	
Q711	MSB709-R	TRANSISTOR	1	
Q712	2SD1996-R	TRANSISTOR	1	
Q713	2SD1328-S	TRANSISTOR	1	
Q771	MSD601	TRANSISTOR	1	
Q772	MSD601-S	TRANSISTOR	1	
Q801	2SA1022	TRANSISTOR	1	
Q802	MSC2295	TRANSISTOR	1	
Q803	MSB709	TRANSISTOR	1	
Q1001	2SD1996	TRANSISTOR	1	
Q2001,02	MSB709	TRANSISTOR	2	
Q3001	MSD602	TRANSISTOR	1	
Q3002	2SB1322	TRANSISTOR	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
Q3003	MSD601	TRANSISTOR	1	
Q3004	MSC2295	TRANSISTOR	1	
Q3005,06	MSD601	TRANSISTOR	2	
Q3301,02	MSC2295	TRANSISTOR	2	
Q3304,05	MSD601	TRANSISTOR	2	
Q3401,02	MSC2295	TRANSISTOR	2	
Q3403	MSD601	TRANSISTOR	1	
Q3404	MSC2295	TRANSISTOR	1	
Q3405-07	MSD601	TRANSISTOR	3	
Q3408	MSD602	TRANSISTOR	1	
Q3409	MSB710	TRANSISTOR	1	
Q3410-12	MSD601	TRANSISTOR	3	
Q3422	MSD1328	TRANSISTOR	1	
Q3423	MSD601	TRANSISTOR	1	
Q3424	MSB710	TRANSISTOR	1	
Q3425	MSC2295	TRANSISTOR	1	
Q3501	MSD601	TRANSISTOR	1	
Q3502	MSB709	TRANSISTOR	1	
Q3601	MSD601	TRANSISTOR	1	
Q3602,03	MSC2295	TRANSISTOR	2	
Q3604	MSB709	TRANSISTOR	1	
Q3901,02	2SD1991A	TRANSISTOR	2	
Q3903	MSD1328	TRANSISTOR	1	
Q3904	MSD601	TRANSISTOR	1	
Q3905	MSC2295	TRANSISTOR	1	
Q3906	MSB709	TRANSISTOR	1	
Q3907	MSD601	TRANSISTOR	1	
Q3912	2SD1996	TRANSISTOR	1	
Q3913-15	MSD601	TRANSISTOR	3	
Q3916	MSB710	TRANSISTOR	1	
Q3917	MSD602	TRANSISTOR	1	
Q3918	MSB710	TRANSISTOR	1	
Q4501	2SD655	TRANSISTOR	1	
Q4551	2SB561	TRANSISTOR	1	
Q4601,02	MSD1328	TRANSISTOR	2	
Q4701	2SD602A-R	TRANSISTOR	1	
Q4702,03	MSD601	TRANSISTOR	2	
Q4704,05	MSB710	TRANSISTOR	2	
Q4706	2SB1378	TRANSISTOR	1	
Q4707	2SD601A	TRANSISTOR	1	
Q4708	2SB1378	TRANSISTOR	1	
Q6001	2SD1991A	TRANSISTOR	1	
Q6002	MSB709	TRANSISTOR	1	
Q6003	2SD1915F	TRANSISTOR	1	
Q6004-06	MSD601	TRANSISTOR	3	
Q6008	2SD1991	TRANSISTOR	1	
Q7901,02	MSD601	TRANSISTOR	2	
Q7903	2SC3931CD	TRANSISTOR	1	
Q7904-07	2SB1219	TRANSISTOR	4	
Q7908,09	2SC3929	TRANSISTOR	2	
Q7910	2SD1820	TRANSISTOR	1	
Q7913	2SB1218-Q	TRANSISTOR	1	
Q7914,15	2SD1979-S	TRANSISTOR	2	
Q7916	2SB1219	TRANSISTOR	1	
QR301	MRN1402	TRANSISTOR-RESISTOR	1	
QR302	MRN1403	TRANSISTOR-RESISTOR	1	
QR303	MRN1404	TRANSISTOR-RESISTOR	1	
QR304	MRN1402	TRANSISTOR-RESISTOR	1	
QR305	MRN2404	TRANSISTOR-RESISTOR	1	
QR306	XN6213	TRANSISTOR-RESISTOR	1	
QR307	MRN1404	TRANSISTOR-RESISTOR	1	
QR308	MRN1407	TRANSISTOR-RESISTOR	1	
QR309	MRN1402	TRANSISTOR-RESISTOR	1	
QR310	MRN1404	TRANSISTOR-RESISTOR	1	
QR311	MRN2404	TRANSISTOR-RESISTOR	1	
QR312	MRN2402	TRANSISTOR-RESISTOR	1	
QR313,14	MRN1404	TRANSISTOR-RESISTOR	2	
QR315	MRN2404	TRANSISTOR-RESISTOR	1	
QR316,17	XN6213	TRANSISTOR-RESISTOR	2	
QR318	MRN1402	TRANSISTOR-RESISTOR	1	
QR319,20	MRN1404	TRANSISTOR-RESISTOR	2	
QR701	UN4214	TRANSISTOR-RESISTOR	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
QR702	MRN1404	TRANSISTOR-RESISTOR	1	
QR713	MRN1402	TRANSISTOR-RESISTOR	1	
QR802	MRN1404	TRANSISTOR-RESISTOR	1	
QR803	MRN1403	TRANSISTOR-RESISTOR	1	
QR805	MRN1404	TRANSISTOR-RESISTOR	1	
QR806	XN6213	TRANSISTOR-RESISTOR	1	
QR1001,02	MRN1402	TRANSISTOR-RESISTOR	2	
QR2001	XN1213	TRANSISTOR-TRANSISTOR	1	
QR2002	MRN2404	TRANSISTOR-RESISTOR	1	
QR2501	XN1211	TRANSISTOR-RESISTOR	1	
QR3001,02	MRN1403	TRANSISTOR-RESISTOR	2	
QR3003	MRN2402	TRANSISTOR-RESISTOR	1	
QR3301-04	DTC363EK	TRANSISTOR-RESISTOR	4	
QR3305	UN211D	TRANSISTOR-RESISTOR	1	
QR3306	DTC363EK	TRANSISTOR-RESISTOR	1	
QR3307	MRN1404	TRANSISTOR-RESISTOR	1	
QR3402	MRN2402	TRANSISTOR-RESISTOR	1	
QR3403	MRN1403	TRANSISTOR-RESISTOR	1	
QR3404	XN4212	TRANSISTOR-TRANSISTOR	1	
QR3405	MRN1403	TRANSISTOR-RESISTOR	1	
QR3406-08	XN1212	TRANSISTOR-RESISTOR	3	
QR3409,10	MRN1403	TRANSISTOR-RESISTOR	2	
QR3411	MRN1402	TRANSISTOR-RESISTOR	1	
QR3412	MRN1404	TRANSISTOR-RESISTOR	1	
QR3415	XN4212	TRANSISTOR-TRANSISTOR	1	
QR3416	XN1212	TRANSISTOR-RESISTOR	1	
QR3417	XN4212	TRANSISTOR-TRANSISTOR	1	
QR3901-03	MRN1404	TRANSISTOR-RESISTOR	3	
QR3904,05	MRN1402	TRANSISTOR-RESISTOR	2	
QR3906	MRN1404	TRANSISTOR-RESISTOR	1	
QR4001	MRN1403	TRANSISTOR-RESISTOR	1	
QR4002,03	DTC363EK	TRANSISTOR-RESISTOR	2	
QR4004,05	MRN1404	TRANSISTOR-RESISTOR	2	
QR4508,09	MRN2404	TRANSISTOR-RESISTOR	2	
QR4510	MRN1403	TRANSISTOR-RESISTOR	1	
QR4602	MRN2402	TRANSISTOR-RESISTOR	1	
QR4603	MRN1404	TRANSISTOR-RESISTOR	1	
QR4701-03	MRN1403	TRANSISTOR-RESISTOR	3	
QR4704	MRN1404	TRANSISTOR-RESISTOR	1	
QR6001	MRN1402	TRANSISTOR-RESISTOR	1	
QR6002,03	MRN2402	TRANSISTOR-RESISTOR	2	
QR6004	MRN1402	TRANSISTOR-RESISTOR	1	
QR6009	XN1213	TRANSISTOR-TRANSISTOR	1	
QR6012	MRN1404	TRANSISTOR-RESISTOR	1	
QR6013	MRN1403	TRANSISTOR-RESISTOR	1	
QR6014	MRN1404	TRANSISTOR-RESISTOR	1	
QR6015	MRN2402	TRANSISTOR-RESISTOR	1	
QR7601	MRN1404	TRANSISTOR-RESISTOR	1	
QR7901,02	UN5213	TRANSISTOR-RESISTOR	2	
QR7903	UN5112	TRANSISTOR-RESISTOR	1	
QR7904	UN5214	TRANSISTOR-RESISTOR	1	
QR7905,06	UN5213	TRANSISTOR-RESISTOR	2	
R301	ERJ6GMYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R303	ERJ6GMYJ562	M.RESISTOR CH 1/10W 5.6K	1	
R304	ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R305	ERJ6GMYJ152	M.RESISTOR CH 1/10W 1.5K	1	
R306	ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
R307	ERJ6GMYJ562	M.RESISTOR CH 1/10W 5.6K	1	
R308	ERJ6GMYJ104	M.RESISTOR CH 1/10W 1M	1	
R309	ERJ6GMYJ471	M.RESISTOR CH 1/10W 470	1	
R310	ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R311	ERJ6GMYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R312	ERJ6GMYJ152	M.RESISTOR CH 1/10W 1.5K	1	
R313	ERJ6GMYJ361	M.RESISTOR CH 1/10W 360	1	
R314	ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R315	ERJ6GMYJ152	M.RESISTOR CH 1/10W 1.5K	1	
R316	ERJ6GMYJ472	M.RESISTOR CH 1/10W 4.7K	1	
R317	ERJ6GMYJ561	M.RESISTOR CH 1/10W 560	1	
R318	ERJ6GMYJ221	M.RESISTOR CH 1/10W 220	1	
R319	ERJ6GMYJ561	M.RESISTOR CH 1/10W 560	1	
R320	ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R321	ERJ6GMYJ122	M.RESISTOR CH 1/10W 1.2K	1	
R322	ERJ6GMYJ563	M.RESISTOR CH 1/10W 56K	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
R323	ERJ6GMYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R324	ERJ6GMYJ152	M.RESISTOR CH 1/10W 1.5K	1	
R325	ERJ6GMYJ101	M.RESISTOR CH 1/10W 100	1	
R326	ERJ6GMYJ562	M.RESISTOR CH 1/10W 5.6K	1	
R327	ERJ6GMYJ223	M.RESISTOR CH 1/10W 22K	1	
R328	ERJ6GMYJ122	M.RESISTOR CH 1/10W 1.2K	1	
R329	ERJ6GMYJ152	M.RESISTOR CH 1/10W 1.5K	1	
R330	ERJ6GMYG432	M.RESISTOR CH 1/10W 4.3K	1	
R331	ERJ6GMYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R332	ERJ6GMYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R333	ERJ6GMYJ152	M.RESISTOR CH 1/10W 1.5K	1	
R334	ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R335	ERJ6GMYJ101	M.RESISTOR CH 1/10W 100	1	
R336	ERJ6GMYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R337	ERJ6GMYJ391	M.RESISTOR CH 1/10W 390	1	
R338,39	ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	2	
R340	ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R341	ERJ6GMYJ471	M.RESISTOR CH 1/10W 470	1	
R342	ERJ6GMYJ181	M.RESISTOR CH 1/10W 180	1	
R343	ERJ6GMYJ273	M.RESISTOR CH 1/10W 27K	1	
R344	ERJ6GMYJ911	M.RESISTOR CH 1/10W 910	1	
R345	ERJ6GMYJ822	M.RESISTOR CH 1/10W 8.2K	1	
R346	ERJ6GMYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R347	ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R348	ERJ6GMYJ273	M.RESISTOR CH 1/10W 27K	1	
R349	ERJ6GMYJ333	M.RESISTOR CH 1/10W 33K	1	
R350	ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R351	ERJ6GMYJ822	M.RESISTOR CH 1/10W 8.2K	1	
R352	ERJ6GMYG183	M.RESISTOR CH 1/10W 18K	1	
R353	ERJ6GMYJ822	M.RESISTOR CH 1/10W 8.2K	1	
R354	ERJ6GMYG753	M.RESISTOR CH 1/10W 75K	1	
R355	ERJ6GMYJ471	M.RESISTOR CH 1/10W 470	1	
R356	ERJ6GMYJ152	M.RESISTOR CH 1/10W 1.5K	1	
R357	ERJ6GMYJ472	M.RESISTOR CH 1/10W 4.7K	1	
R358	ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R359	ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
R360,61	ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	2	
R716	ERJ6GEYJ272	M.RESISTOR CH 1/10W 2.7K	1	
R719	ERJ6GEYJ105	M.RESISTOR CH 1/10W 1M	1	
R720	ERJ6GEYJ682	M.RESISTOR CH 1/10W 6.8K	1	
R721	ERJ6GEYJ471	M.RESISTOR CH 1/10W 470	1	
R724	ERJ6GEYJ822	M.RESISTOR CH 1/10W 8.2K	1	
R725	ERJ6GEYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R727	ERJ6GEYJ681	M.RESISTOR CH 1/10W 680	1	
R728	ERDS2TJ102	C.RESISTOR 1/4W 1K	1	
R729	ERJ6GEYJ681	M.RESISTOR CH 1/10W 680	1	
R730	ERJ6GEYJ272	M.RESISTOR CH 1/10W 2.7K	1	
R736	ERJ6GEYJ471	M.RESISTOR CH 1/10W 470	1	
R737	ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R738	ERJ6GEYJ562	M.RESISTOR CH 1/10W 5.6K	1	
R739	ERJ6GEYJ681	M.RESISTOR CH 1/10W 680	1	
R740	ERJ6GEYJ394	M.RESISTOR CH 1/10W 390K	1	
R741	ERJ6GEYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R742	ERJ6GEYJ272	M.RESISTOR CH 1/10W 2.7K	1	
R743	ERJ6GEYJ474	M.RESISTOR CH 1/10W 470K	1	
R744	ERJ6GEYJ272	M.RESISTOR CH 1/10W 2.7K	1	
R745	ERJ6GEYG181	M.RESISTOR CH 1/10W 180	1	
R746	ERDS2TJ151	C.RESISTOR 1/4W 150	1	
R750	ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R757,58	ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	2	
R759	ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	
R763	ERJ6GEYJ221	M.RESISTOR CH 1/10W 220	1	
R772	ERJ6GEYJ271	M.RESISTOR CH 1/10W 270	1	
R773	ERJ6GEYJ472	M.RESISTOR CH 1/10W 4.7K	1	
R774	ERJ6GEYJ562	M.RESISTOR CH 1/10W 5.6K	1	
R779	ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R781	ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	
R790	ERJ6GEYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R791	ERDS2TJ272	C.RESISTOR 1/4W 2.7K	1	
R798	ERJ6GEYJ104	M.RESISTOR CH 1/10W 100K	1	
R802	ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R803	ERJ6GMYG242	M.RESISTOR CH 1/10W 2.4K	1	
R804,05	ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	2	
R809	ERJ6GMYJ822	M.RESISTOR CH 1/10W 8.2K	1	
R810,11	ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	2	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
R814	ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R815	ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R816	ERJ6GMZOROO	M.RESISTOR CH 1/10W 0	1	
R817	ERJ6GMYJ152	M.RESISTOR CH 1/10W 1.5K	1	
R818	ERJ6GMYJ333	M.RESISTOR CH 1/10W 33K	1	
R820	ERJ6GMYJ471	M.RESISTOR CH 1/10W 470	1	
R821,22	ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	2	
R824	ERJ6GMYJ471	M.RESISTOR CH 1/10W 470	1	
R825	ERJ6GMYJ271	M.RESISTOR CH 1/10W 270	1	
R826	ERJ6GMYJ221	M.RESISTOR CH 1/10W 220	1	
R827	ERJ6GMYJ154	M.RESISTOR CH 1/10W 150K	1	
R828	ERJ6GMYJ204	M.RESISTOR CH 1/10W 200K	1	
R829	ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R830	ERJ6GMYJ154	M.RESISTOR CH 1/10W 150K	1	
R831	ERJ6GMYJ153	M.RESISTOR CH 1/10W 15K	1	
R832	ERJ6GMYJ122	M.RESISTOR CH 1/10W 1.2K	1	
R833	ERJ6GMYJ471	M.RESISTOR CH 1/10W 470	1	
R834	ERJ6GMYJ122	M.RESISTOR CH 1/10W 1.2K	1	
R835,36	ERJ6GMYJ152	M.RESISTOR CH 1/10W 1.5K	2	
R837	ERJ6GMYJ122	M.RESISTOR CH 1/10W 1.2K	1	
R838,39	ERJ6GMYJ681	M.RESISTOR CH 1/10W 680	2	
R840	ERJ6GMYJ272	M.RESISTOR CH 1/10W 2.7K	1	
R841	ERJ6GMYJ182	M.RESISTOR CH 1/10W 1.8K	1	
R842,43	ERJ6GMYJ271	M.RESISTOR CH 1/10W 270	2	
R844	ERJ6GMYJ122	M.RESISTOR CH 1/10W 1.2K	1	
R845	ERJ6GMYJ182	M.RESISTOR CH 1/10W 1.8K	1	
R846	ERJ6GMYJ272	M.RESISTOR CH 1/10W 2.7K	1	
R847	ERJ6GMYJ223	M.RESISTOR CH 1/10W 22K	1	
R848	ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R849	ERJ6GMYK395	M.RESISTOR CH 1/10W 3.9M	1	
R850	ERJ6GMYJ302	M.RESISTOR CH 1/10W 3K	1	
R851	ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R1001	ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R1002	ERDS1TJ822	C.RESISTOR 1/2W 8.2K	1	
R2004	ERJ6GMYJ104	M.RESISTOR CH 1/10W 1M	1	
R2005	ERJ6GMYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R2011	ERJ6GMYG222	M.RESISTOR CH 1/10W 2.2K	1	
R2012	ERJ6GMYG392	M.RESISTOR CH 1/10W 3.9K	1	
R2013,14	ERJ6GMYJ223	M.RESISTOR CH 1/10W 22K	2	
R2015	ERJ6GMYJ472	M.RESISTOR CH 1/10W 4.7K	1	
R2016	ERJ6GMYJ682	M.RESISTOR CH 1/10W 6.8K	1	
R2018	ERJ6GMYJ104	M.RESISTOR CH 1/10W 1M	1	
R2019	ERJ6GEYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R2501	ERX1SJ1R8	M.RESISTOR 1W 1.8	1	
R2502	ERJ6GMYG112	M.REISITOR CH 1/10W 1.1K	1	
R2503	ERJ6GMYG102	M.RESISTOR CH 1/10W 1K	1	
R2504	ERJ6GMYG332	M.RESISTOR CH 1/10W 3.3K	1	
R2505	VREO034E103	M.RESISTOR CH 1/10W 10K	1	
R2506	ERJ6GMYJ564	M.RESISTOR CH 1/10W 560K	1	
R2507	VREO034E103	M.RESISTOR CH 1/10W 10K	1	
R2508	VREO034E512	M.RESISTOR CH 1/10W 5.1K	1	
R2509	VREO034E472	M.RESISTOR CH 1/10W 4.7K	1	
R2510	ERJ6GMYJ105	M.RESISTOR CH 1/10W 1M	1	
R2511	ERJ6GMYJ684	M.RESISTOR CH 1/10W 680K	1	
R2513	ERJ6GMYG133	M.RESISTOR CH 1/10W 13K	1	
R2514	ERJ6GMYG821	M.RESISTOR CH 1/10W 820	1	
R2515	ERG12SJ561	M.RESISTOR 1/2W 560	1	
R2516	ERJ6GMYG473	M.RESISTOR CH 1/10W 47K	1	
R2517	ERX12SJR47	M.RESISTOR CH 1/2W 0.47	1	
R2518	ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R2519	ERJ6GMYG432	M.RESISTOR CH 1/10W 4.3K	1	
R2520	ERJ6GMYG103	M.RESISTOR CH 1/10W 10K	1	
R2521-23	ERDS2TJ560	C.RESISTOR 1/4W 56	3	
R2524	ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R2525	EROS2CKG6800	M.RESISTOR 1/4W 680	1	
R2526	ERJ6GMYJ392	M.RESISTOR CH 1/10W 3.9K	1	
R2527	ERJ6GMYJ105	M.RESISTOR CH 1/10W 1M	1	
R2528	ERJ6GMYJ562	M.RESISTOR CH 1/10W 5.6K	1	
R2529	ERJ6GMYJ392	M.RESISTOR CH 1/10W 3.9K	1	
R2530	ERJ6GMYJ105	M.RESISTOR CH 1/10W 1M	1	
R2531,32	ERJ6GMYJ472	M.RESISTOR CH 1/10W 4.7K	2	
R2533	ERJ6GMYJ393	M.RESISTOR CH 1/10W 39K	1	
R2534	ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R2535	ERJ6GMYJ272	M.RESISTOR CH 1/10W 2.7K	1	
R2536	ERJ6GMYJ824	M.RESISTOR CH 1/10W 820K	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
R2537	ERJ6GMYJ393	M.RESISTOR CH 1/10W 39K	1	
R2538	ERJ6GMYJ182	M.RESISTOR CH 1/10W 1.8K	1	
R2539	ERJ6GMYJ681	M.RESISTOR CH 1/10W 680	1	
R2540	ERJ6GMYJ105	M.RESISTOR CH 1/10W 1M	1	
R2541	ERJ6GMYJ271	M.RESISTOR CH 1/10W 270	1	
R3001,02	ERJ6GMYJ750	M.RESISTOR CH 1/10W 75	2	
R3003	ERJ6GMYJ333	M.RESISTOR CH 1/10W 33K	1	
R3004	ERJ6GMYJ683	M.RESISTOR CH 1/10W 68K	1	
R3005	ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R3006,07	ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	2	
R3008	ERJ6GMYJ152	M.RESISTOR CH 1/10W 1.5K	1	
R3009	ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R3010	ERJ6GMYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R3011	ERJ6GMYJ272	M.RESISTOR CH 1/10W 2.7K	1	
R3012	ERJ6GMYG911	M.RESISTOR CH 1/10W 910	1	
R3013	ERJ6GMYG102	M.RESISTOR CH 1/10W 1K	1	
R3014	ERJ6GMYG471	M.RESISTOR CH 1/10W 470	1	
R3015	ERJ6GMYG102	M.RESISTOR CH 1/10W 1K	1	
R3016	ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R3017	ERJ6GMYJ152	M.RESISTOR CH 1/10W 1.5K	1	
R3018	ERJ6GMYJ392	M.RESISTOR CH 1/10W 3.9K	1	
R3019	ERJ6GMYJ472	M.RESISTOR CH 1/10W 4.7K	1	
R3021	ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R3022	ERJ6GMYJ101	M.RESISTOR CH 1/10W 100	1	
R3023	ERJ6GEYJ221	M.RESISTOR CH 1/10W 220	1	
R3024	ERJ6GMYJ221	M.RESISTOR CH 1/10W 220	1	
R3025	ERJ6GEYJ221	M.RESISTOR CH 1/10W 220	1	
R3026,27	ERJ6GMYJ221	M.RESISTOR CH 1/10W 220	2	
R3301	ERJ6GMYJ473	M.RESISTOR CH 1/10W 47K	1	
R3302	ERJ6GMYJ183	M.RESISTOR CH 1/10W 18K	1	
R3303	ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R3304	ERJ6GMYJ472	M.RESISTOR CH 1/10W 4.7K	1	
R3305	ERJ6GMYJ562	M.RESISTOR CH 1/10W 5.6K	1	
R3306	ERJ6GMYJ472	M.RESISTOR CH 1/10W 4.7K	1	
R3307	ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R3308	ERJ6GMYJ272	M.RESISTOR CH 1/10W 2.7K	1	
R3310	ERJ6GMYJ272	M.RESISTOR CH 1/10W 2.7K	1	
R3322	ERJ6GMYJ471	M.RESISTOR CH 1/10W 470	1	
R3323	ERJ6GMYJ561	M.RESISTOR CH 1/10W 560	1	
R3324	ERJ6GMYJ152	M.RESISTOR CH 1/10W 1.5K	1	
R3325,26	ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	2	
R3327	ERJ6GMYJ821	M.RESISTOR CH 1/10W 820	1	
R3328	ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R3333	ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R3334	ERJ6GMYJ682	M.RESISTOR CH 1/10W 6.8K	1	
R3335	ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R3336,37	ERJ6GMYJ681	M.RESISTOR CH 1/10W 680	2	
R3338	ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R3339	ERJ6GMYJ473	M.RESISTOR CH 1/10W 47K	1	
R3340	ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R3341	ERJ6GMYJ563	M.RESISTOR CH 1/10W 56K	1	
R3342	ERJ6GMYJ391	M.RESISTOR CH 1/10W 390	1	
R3345-47	ERJ6GMYJ821	M.RESISTOR CH 1/10W 820	3	
R3352	ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R3353	ERJ6GMZOROO	M.RESISTOR CH 1/10W 0	1	
R3401	ERJ6GMYJ272	M.RESISTOR CH 1/10W 2.7K	1	
R3402	ERJ6GMYJ183	M.RESISTOR CH 1/10W 18K	1	
R3403	ERJ6GMYG361	M.RESISTOR CH 1/10W 360	1	
R3404	ERJ6GMYJ473	M.RESISTOR CH 1/10W 47K	1	
R3405	ERJ6GMYG123	M.RESISTOR CH 1/10W 12K	1	
R3406	ERJ6GMYG512	M.RESISTOR CH 1/10W 5.1K	1	
R3407	ERJ6GMYG272	M.RESISTOR CH 1/10W 2.7K	1	
R3408	ERJ6GMYG302	M.RESISTOR CH 1/10W 3K	1	
R3409	ERJ6GMYG821	M.RESISTOR CH 1/10W 820	1	
R3410	ERJ6GMYJ473	M.RESISTOR CH 1/10W 47K	1	
R3411 13	ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	3	
R3415	ERJ6GMYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R3417	ERJ6GMYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R3422	ERJ6GMYG333	M.RESISTOR CH 1/10W 33K	1	
R3423	ERJ6GMYG683	M.RESISTOR CH 1/10W 68K	1	
R3424	ERJ6GMYJ272	M.RESISTOR CH 1/10W 2.7K	1	
R3425	ERJ6GMYJ183	M.RESISTOR CH 1/10W 18K	1	
R3426	ERJ6GMYJ391	M.RESISTOR CH 1/10W 390	1	
R3427	ERJ6GMYJ473	M.RESISTOR CH 1/10W 47K	1	
R3428	ERJ6GMYJ471	M.RESISTOR CH 1/10W 470	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
R3429	ERJ6GMYJ473	M.RESISTOR CH 1/10W 47K	1	
R3430	ERJ6GMYJ823	M.RESISTOR CH 1/10W 82K	1	
R3431	ERJ6GMYG821	M.RESISTOR CH 1/10W 820	1	
R3433	ERJ6GMYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R3434	ERJ6GMYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R3435	ERJ6GMYG302	M.RESISTOR CH 1/10W 3K	1	
R3436	ERJ6GMYG272	M.RESISTOR CH 1/10W 2.7K	1	
R3437	ERJ6GMYG512	M.RESISTOR CH 1/10W 5.1K	1	
R3438	ERJ6GMYG123	M.RESISTOR CH 1/10W 12K	1	
R3441	ERJ6GMYJ333	M.RESISTOR CH 1/10W 33K	1	
R3442	ERJ6GMYJ473	M.RESISTOR CH 1/10W 47K	1	
R3443	ERJ6GMYJ333	M.RESISTOR CH 1/10W 33K	1	
R3444,45	ERJ6GMYJ473	M.RESISTOR CH 1/10W 47K	2	
R3446,47	ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	2	
R3463	ERJ6GMYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R3464	ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R3465	ERJ6GMYJ122	M.RESISTOR CH 1/10W 1.2K	1	
R3466	ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R3467	ERJ6GMYJ182	M.RESISTOR CH 1/10W 1.8K	1	
R3468,69	ERJ6GMYJ822	M.RESISTOR CH 1/10W 8.2K	2	
R3470	ERJ6GMYG123	M.RESISTOR CH 1/10W 12K	1	
R3471	ERJ6GMYG512	M.RESISTOR CH 1/10W 5.1K	1	
R3472	ERJ6GMYG272	M.RESISTOR CH 1/10W 2.7K	1	
R3473	ERJ6GMYG302	M.RESISTOR CH 1/10W 3K	1	
R3474	ERJ6GMYG821	M.RESISTOR CH 1/10W 820	1	
R3475	ERJ6GMYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R3501	ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R3502	ERJ6GMYJ682	M.RESISTOR CH 1/10W 6.8K	1	
R3503	ERJ6GMYJ152	M.RESISTOR CH 1/10W 1.5K	1	
R3504,05	ERJ6GMYJ221	M.RESISTOR CH 1/10W 220	2	
R3506	ERJ6GMYJ104	M.RESISTOR CH 1/10W 1M	1	
R3507	ERJ6GMYG103	M.RESISTOR CH 1/10W 10K	1	
R3508	ERJ6GMYG332	M.RESISTOR CH 1/10W 3.3K	1	
R3509-11	ERJ6GMYJ333	M.RESISTOR CH 1/10W 33K	3	
R3513,14	ERJ6GMYJ332	M.RESISTOR CH 1/10W 3.3K	2	
R3515	ERJ6GMYJ562	M.RESISTOR CH 1/10W 5.6K	1	
R3516	ERJ6GMYJ152	M.RESISTOR CH 1/10W 1.5K	1	
R3517	ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R3518	ERJ6GMYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R3519	ERJ6GMYJ272	M.RESISTOR CH 1/10W 2.7K	1	
R3520	ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R3521	ERJ6GMYJ122	M.RESISTOR CH 1/10W 1.2K	1	
R3522	ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R3523	ERJ6GMYJ122	M.RESISTOR CH 1/10W 1.2K	1	
R3524	ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R3525	ERJ6GMYJ331	M.RESISTOR CH 1/10W 330	1	
R3526	ERJ6GMYJ470	M.RESISTOR CH 1/10W 47	1	
R3601	ERJ6GMYJ152	M.RESISTOR CH 1/10W 1.5K	1	
R3602	ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R3603	ERJ6GMYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R3604	ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R3605	ERJ6GMYJ223	M.RESISTOR CH 1/10W 22K	1	
R3606	ERJ6GMYJ821	M.RESISTOR CH 1/10W 820	1	
R3607-12	ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	6	
R3613	ERJ6GMYJ561	M.RESISTOR CH 1/10W 560	1	
R3614	ERJ6GMYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R3615	ERJ6GMYJ681	M.RESISTOR CH 1/10W 680	1	
R3616	ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R3901-05	ERJ6GMYJ750	M.RESISTOR CH 1/10W 75	5	
R3906	ERDS1TJ750	C.RESISTOR 1/2W 75	1	
R3908,09	ERJ6GMYJ750	M.RESISTOR CH 1/10W 75	2	
R3910,11	ERJ6GMYJ471	M.RESISTOR CH 1/10W 470	2	
R3912,13	ERJ6GMYJ151	M.RESISTOR CH 1/10W 150	2	
R3914	ERJ6GMYJ750	M.RESISTOR CH 1/10W 75	1	
R3915	ERJ6GMYJ472	M.RESISTOR CH 1/10W 4.7K	1	
R3916,17	ERDS2TJ181	C.RESISTOR 1/4W 180	2	
R3926	ERJ6GMYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R3927,28	ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	2	
R3929	ERJ6GMYJ152	M.RESISTOR CH 1/10W 1.5K	1	
R3930	ERJ6GMYJ112	M.RESISTOR CH 1/10W 1.1K	1	
R3931	ERJ6GMYJ123	M.RESISTOR CH 1/10W 12K	1	
R3932	ERJ6GMYJ183	M.RESISTOR CH 1/10W 18K	1	
R3933	ERJ6GMYJ104	M.RESISTOR CH 1/10W 1M	1	
R3934	ERJ6GMYJ223	M.RESISTOR CH 1/10W 22K	1	
R3935	ERJ6GMYJ222	M.RESISTOR CH 1/10W 2.2K	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
R3936	ERJ6GMYJ561	M.RESISTOR CH 1/10W 560	1	
R3938	ERJ6GMYJ473	M.RESISTOR CH 1/10W 47K	1	
R3945	ERJ6GMYJ561	M.RESISTOR CH 1/10W 560	1	
R3946	ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
R3950,51	ERJ6GMYJ331	M.RESISTOR CH 1/10W 330	2	
R3953	ERDS2TJ562	C.RESISTOR 1/4W 5.6K	1	
R3954	ERJ6GMYJ682	M.RESISTOR CH 1/10W 6.8K	1	
R3955	ERJ6GMYJ123	M.RESISTOR CH 1/10W 12K	1	
R3956	ERJ6GMYJ822	M.RESISTOR CH 1/10W 8.2K	1	
R3957-60	ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	4	
R3961	ERJ6GMYJ750	M.RESISTOR CH 1/10W 75	1	
R3962	ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R3963	ERJ6GMYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R3964	ERJ6GMYJ223	M.RESISTOR CH 1/10W 22K	1	
R3965	ERJ6GMYJ562	M.RESISTOR CH 1/10W 5.6K	1	
R3966	ERJ6GMYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R3967	ERJ6GMYJ272	M.RESISTOR CH 1/10W 2.7K	1	
R3968	ERJ6GMYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R4001,02	ERDS2TJ680	C.RESISTOR 1/4W 68	2	
R4003-08	ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	6	
R4009	ERJ6GMYJ472	M.RESISTOR CH 1/10W 4.7K	1	
R4010	ERJ6GMYG433	M.RESISTOR CH 1/10W 43K	1	
R4011	ERJ6GMYJ152	M.RESISTOR CH 1/10W 1.5K	1	
R4012	ERJ6GMYJ272	M.RESISTOR CH 1/10W 2.7K	1	
R4013	ERJ6GMYJ682	M.RESISTOR CH 1/10W 6.8K	1	
R4014	ERJ6GMYG100	M.RESISTOR CH 1/10W 10	1	
R4015	ERJ6GMYJ822	M.RESISTOR CH 1/10W 8.2K	1	
R4020	ERJ6GMYJ562	M.RESISTOR CH 1/10W 5.6K	1	
R4021	ERJ6GMYJ333	M.RESISTOR CH 1/10W 33K	1	
R4022	ERJ6GMYJ273	M.RESISTOR CH 1/10W 27K	1	
R4028	ERJ6GMYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R4029,30	ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	2	
R4033	ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
R4034	ERJ6GMYG393	M.RESISTOR CH 1/10W 39K	1	
R4035	ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
R4036	ERJ6GMYG393	M.RESISTOR CH 1/10W 39K	1	
R4501,02	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	2	
R4503	VRE0071E36C	M.RESISTOR CH 1/10W	1	
R4504,05	ERJ6GEYJ393	M.RESISTOR CH 1/10W 39K	2	
R4506,07	ERJ6GEYJ473	M.RESISTOR CH 1/10W 47K	2	
R4508	ERJ6GEYG224	M.RESISTOR CH 1/10W 220K	1	
R4509	ERJ6GEYJ822	M.RESISTOR CH 1/10W 8.2K	1	
R4510	ERJ6GEYJ621	M.RESISTOR CH 1/10W 620	1	
R4511	ERJ6GEYG273	M.RESISTOR CH 1/10W 27K	1	
R4512	VRE0034E163	M.RESISTOR CH 1/10W 16K	1	
R4513	ERJ3GEYG103	M.RESISTOR CH 1/16W 10K	1	
R4514,15	ERJ6GEYJ223	M.RESISTOR CH 1/10W 22K	2	
R4518,19	ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	2	
R4522	ERJ6GEYJ225	M.RESISTOR CH 1/10W 2.2M	1	
R4527	VRE0034E333	M.RESISTOR CH 1/10W 33K	1	
R4528	VRE0034E153	M.RESISTOR CH 1/10W 15K	1	
R4529	ERJ6GEYG562	M.RESISTOR CH 1/10W 5.6K	1	
R4530	ERJ3GEYJ334	M.RESISTOR CH 1/16W 330K	1	
R4534	ERJ6GEYJ472	M.RESISTOR CH 1/10W 4.7K	1	
R4535	ERJ3GEYJ104	M.RESISTOR CH 1/16W 100K	1	
R4539	ERJ6GEYJ104	M.RESISTOR CH 1/10W 100K	1	
R4541	ERJ6GEYJ152	M.RESISTOR CH 1/10W 1.5K	1	
R4542	ERJ6GEYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R4543	ERJ3GEYJ472	M.RESISTOR CH 1/16W 4.7K	1	
R4551,52	ERJ3GEYJ393	M.RESISTOR CH 1/16W 39K	2	
R4553	ERJ6GEYJ273	M.RESISTOR CH 1/10W 27K	1	
R4554	ERJ3GEYJ273	M.RESISTOR CH 1/16W 27K	1	
R4558	ERJ6GEYG224	M.RESISTOR CH 1/10W 220K	1	
R4561	ERJ6GEYG273	M.RESISTOR CH 1/10W 27K	1	
R4562	VRE0034E10C	M.RESISTOR CH 1/10W	1	
R4563	ERJ3GEYG272	M.RESISTOR CH 1/16W 2.7K	1	
R4568	ERJ6GEYJ273	M.RESISTOR CH 1/10W 27K	1	
R4569	ERJ3GEYJ273	M.RESISTOR CH 1/16W 27K	1	
R4573	ERJ6GEYJ152	M.RESISTOR CH 1/10W 1.5K	1	
R4577	ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	1	
R4578	VRE0034E473	M.RESISTOR CH 1/10W 47K	1	
R4581	ERJ6GEYJ104	M.RESISTOR CH 1/10W 100K	1	
R4583	ERJ3GEYJ102	M.RESISTOR CH 1/16W 1K	1	
R4584	ERJ6GEYJ152	M.RESISTOR CH 1/10W 1.5K	1	
R4585	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
R4586	ERJ6GEYJ152	M.RESISTOR CH 1/10W 1.5K	1	
R4587,88	ERJ3GEYJ273	M.RESISTOR CH 1/16W 27K	2	
R4591	ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	1	
R4592	ERJ6GEYJ563	M.RESISTOR CH 1/10W 56K	1	
R4593	ERJ6GEYJ472	M.RESISTOR CH 1/10W 4.7K	1	
R4594	ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	1	
R4603	ERJ3GEYG183	M.RESISTOR CH 1/16W 18K	1	
R4606	ERJ6GEYJ562	M.RESISTOR CH 1/10W 5.6K	1	
R4610	ERJ6GEYJ473	M.RESISTOR CH 1/10W 47K	1	
R4611	ERJ6GMYJ101	M.RESISTOR CH 1/10W 100	1	
R4612	ERJ6GEYJ331	M.RESISTOR CH 1/10W 330	1	
R4613	ERJ6GEYJ394	M.RESISTOR CH 1/10W 390K	1	
R4615	ERJ6GEYJ133	M.RESISOTR CH 1/10W 13K	1	
R4616	ERJ6GEYJ105	M.RESISTOR CH 1/10W 1M	1	
R4638	ERJ6GMZOROO	M.RESISTOR CH 1/10W 0	1	
R4649	ERJ3GEYG470	M.RESISTOR CH 1/16W 47	1	
R4651	ERJ6GEYJ101	M.RESISTOR CH 1/10W 100	1	
R4652	ERJ6GEYJ223	M.RESISTOR CH 1/10W 22K	1	
R4653	ERJ6GEYJ221	M.RESISTOR CH 1/10W 220	1	
R4654	ERJ6GEYJ223	M.RESISTOR CH 1/10W 22K	1	
R4655	ERJ6GEYJ562	M.RESISTOR CH 1/10W 5.6K	1	
R4656	ERJ6GEYG243	M.RESISTOR CH 1/10W 24K	1	
R4657	ERJ6GEYJ392	M.RESISTOR CH 1/10W 3.9K	1	
R4666	ERJ6GEYJ471	M.RESISTOR CH 1/10W 470	1	
R4701	ERJ6GMYJ153	M.RESISTOR CH 1/10W 15K	1	
R4702	ERJ6GMYJ821	M.RESISTOR CH 1/10W 820	1	
R4703	ERJ6GMYJ471	M.RESISTOR CH 1/10W 470	1	
R4704,05	ERJ6GMYJ153	M.RESISTOR CH 1/10W 15K	2	
R4706	ERJ6GMYJ562	M.RESISTOR CH 1/10W 5.6K	1	
R4707	ERJ6GMYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R4708	ERJ6GMYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R4709	ERJ6GMYJ152	M.RESISTOR CH 1/10W 1.5K	1	
R4710	ERJ6GMYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R4711	ERJ6GMYJ223	M.RESISTOR CH 1/10W 22K	1	
R4712	ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R4713	ERJ6GMYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R4714	ERJ6GMYJ562	M.RESISTOR CH 1/10W 5.6K	1	
R4715	ERJ6GMYJ333	M.RESISTOR CH 1/10W 33K	1	
R4716	ERJ6GMYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R4717	ERJ6GMYJ152	M.RESISTOR CH 1/10W 1.5K	1	
R4718	ERJ6GMYG753	M.RESISTOR CH 1/10W 75K	1	
R4719	ERJ6GMYG203	M.RESISTOR CH 1/10W 20K	1	
R4720,21	ERJ6GMYJ822	M.RESISTOR CH 1/10W 8.2K	2	
R4722	ERJ6GMYJ104	M.RESISTOR CH 1/10W 1M	1	
R4723	ERJ6GMYJ183	M.RESISTOR CH 1/10W 18K	1	
R4724,25	ERJ6GMYJ473	M.RESISTOR CH 1/10W 47K	2	
R4726	ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R4901,02	ERJ6GMYJ391	M.RESISTOR CH 1/10W 390	2	
R4903,04	ERJ6GMYJ222	M.RESISTOR CH 1/10W 2.2K	2	
R4905,06	ERJ6GMYJ391	M.RESISTOR CH 1/10W 390	2	
R4907,08	ERJ6GMYJ222	M.RESISTOR CH 1/10W 2.2K	2	
R4909,10	ERJ6GMYJ221	M.RESISTOR CH 1/10W 220	2	
R4915-18	ERJ6GMYJ473	M.RESISTOR CH 1/10W 47K	4	
R4921	ERJ6GMYG163	M.RESISTOR CH 1/10W 16K	1	
R4922,23	ERJ6GMYG433	M.RESISTOR CH 1/10W 43K	2	
R4924	ERJ6GMYG163	M.RESISTOR CH 1/10W 16K	1	
R4925	ERJ6GMYG473	M.RESISTOR CH 1/10W 47K	1	
R4926	ERJ6GMYG223	M.RESISTOR CH 1/10W 22K	1	
R4929	ERJ6GMYG223	M.RESISTOR CH 1/10W 22K	1	
R4930	ERJ6GMYG473	M.RESISTOR CH 1/10W 47K	1	
R6001	ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R6002,03	ERJ6GMYJ272	M.RESISTOR CH 1/10W 2.7K	2	
R6004	EROS2CKG2000	M.RESISTOR 1/4W 200	1	
R6005	ERJ6GMYJ471	M.RESISTOR CH 1/10W 470	1	
R6006	ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R6007-09	ERJ6GMYJ333	M.RESISTOR CH 1/10W 33K	3	
R6010,11	ERJ6GMYG223	M.RESISTOR CH 1/10W 22K	2	
R6012	ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R6013	ERJ6GMYJ223	M.RESISTOR CH 1/10W 22K	1	
R6015,16	ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	2	
R6017	ERJ6GMYJ223	M.RESISTOR CH 1/10W 22K	1	
R6018	ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R6019	ERJ6GMYJ223	M.RESISTOR CH 1/10W 22K	1	
R6020,21	ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	2	
R6022-24	ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	3	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
R6025	ERJ6GMYJ272	M.RESISTOR CH 1/10W 2.7K	1	
R6027	ERJ6GMYJ101	M.RESISTOR CH 1/10W 100	1	
R6028	ERJ6GMZOROO	M.RESISTOR CH 1/10W 0	1	
R6029	ERJ6GMYJ183	M.RESISTOR CH 1/10W 18K	1	
R6030	ERJ6GMYJ101	M.RESISTOR CH 1/10W 100	1	
R6031	ERJ6GMYJ472	M.RESISTOR CH 1/10W 4.7K	1	
R6032,33	ERJ6GMYJ271	M.RESISTOR CH 1/10W 270	2	
R6034	ERJ6GMYJ223	M.RESISTOR CH 1/10W 22K	1	
R6035	ERJ6GMYJ104	M.RESISTOR CH 1/10W 1M	1	
R6036	ERJ6GMYJ123	M.RESISTOR CH 1/10W 12K	1	
R6037,38	ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	2	
R6039,40	ERJ6GMYJ223	M.RESISTOR CH 1/10W 22K	2	
R6041	ERJ6GMYJ221	M.RESISTOR CH 1/10W 220	1	
R6042	ERJ6GMYJ271	M.RESISTOR CH 1/10W 270	1	
R6044-49	ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	6	
R6050	ERJ6GMYJ473	M.RESISTOR CH 1/10W 47K	1	
R6051	ERJ6GMYJ271	M.RESISTOR CH 1/10W 270	1	
R6052	ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R6053	ERJ6GMYJ682	M.RESISTOR CH 1/10W 6.8K	1	
R5054	ERJ6GMZOROO	M.RESISTOR CH 1/10W 0	1	
R6055	ERJ6GMYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R6056,57	ERJ6GMYJ223	M.RESISTOR CH 1/10W 22K	2	
R6058,59	ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	2	
R6060	ERJ6GMYJ223	M.RESISTOR CH 1/10W 22K	1	
R6061,62	ERJ6GMYJ683	M.RESISTOR CH 1/10W 68K	2	
R6063	ERJ6GMYJ224	M.RESISTOR CH 1/10W 220K	1	
R6064	ERJ6GMYJ104	M.RESISTOR CH 1/10W 1M	1	
R6066	ERJ6GMYJ473	M.RESISTOR CH 1/10W 47K	1	
R6067	ERJ6GMYJ181	M.RESISTOR CH 1/10W 180	1	
R6068-70	ERJ6GMYJ332	M.RESISTOR CH 1/10W 3.3K	3	
R6071	ERDS2TJ391	C.RESISTOR 1/4W 390	1	
R6074	ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R6075	ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R6076	ERJ6GMYJ563	M.RESISTOR CH 1/10W 56K	1	
R6077	ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R6078	ERJ6GMYJ223	M.RESISTOR CH 1/10W 22K	1	
R6079	ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R6081	ERJ6GMYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R6082	ERJ6GMYJ223	M.RESISTOR CH 1/10W 22K	1	
R6083-86	ERJ6GMYJ473	M.RESISTOR CH 1/10W 47K	4	
R6087,88	ERJ6GMYJ332	M.RESISTOR CH 1/10W 3.3K	2	
R6089,90	ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	2	
R6091	ERJ6GMYJ473	M.RESISTOR CH 1/10W 47K	1	
R6092,93	ERJ6GMYJ271	M.RESISTOR CH 1/10W 270	2	
R6094	ERJ6GMYJ473	M.RESISTOR CH 1/10W 47K	1	
R6096	ERJ6GMYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R6097,98	ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	2	
R6099	ERJ6GMYJ822	M.RESISTOR CH 1/10W 8.2K	1	
R6100	ERJ6GMYJ473	M.RESISTOR CH 1/10W 47K	1	
R6101	ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R6102,03	ERJ6GMYJ272	M.RESISTOR CH 1/10W 2.7K	2	
R6104	ERJ6GMZOROO	M.RESISTOR CH 1/10W 0	1	
R6106,07	ERJ6GMYJ221	M.RESISTOR CH 1/10W 220	2	
R6108	ERJ6GMYJ473	M.RESISTOR CH 1/10W 47K	1	
R6109	ERJ6GMYJ333	M.RESISTOR CH 1/10W 33K	1	
R6110	ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R6112	ERJ6GMYJ473	M.RESISTOR CH 1/10W 47K	1	
R6113	ERJ6GMYJ472	M.RESISTOR CH 1/10W 4.7K	1	
R6115	ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R6117	ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R6119,20	ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	2	
R6122	ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R6123	ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R6124	ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R6125	ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R7201	ERDS2TJ103	C.RESISTOR 1/4W 10K	1	
R7202	ERDS2TJ105	C.RESISTOR 1/4W 1M	1	
R7203	ERDS2TJ102	C.RESISTOR 1/4W 1K	1	
R7204	ERDS2TJ472	C.RESISTOR 1/4W 4.7K	1	
R7205	ERDS2TJ102	C.RESISTOR 1/4W 1K	1	
R7206	ERDS2TJ824	C.RESISTOR 1/4W 820K	1	
R7403	ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R7405,06	ERJ6GMYJ221	M.RESISTOR CH 1/10W 220	2	
R7410-12	ERJ6GMYJ221	M.RESISTOR CH 1/10W 220	3	
R7413-19	ERJ6GMYJ332	M.RESISTOR CH 1/10W 3.3K	7	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
R7420	ERJ6GMYJ152	M.RESISTOR CH 1/10W 1.5K	1	
R7421-23	ERJ6GMYJ332	M.RESISTOR CH 1/10W 3.3K	3	
R7651	ERJ6GEYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R7654	ERJ6GEYJ562	M.RESISTOR CH 1/10W 5.6K	1	
R7655	ERJ6GEYJ472	M.RESISTOR CH 1/10W 4.7K	1	
R7656	ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R7657	ERJ6GEYJ104	M.RESISTOR CH 1/10W 100K	1	
R7658	ERJ6GEYJ393	M.RESISTOR CH 1/10W 39K	1	
R7659	ERJ6GEYJ822	M.RESISTOR CH 1/10W 8.2K	1	
R7661	ERJ6GEYJ562	M.RESISTOR CH 1/10W 5.6K	1	
R7662	ERJ6GEYJ393	M.RESISTOR CH 1/10W 39K	1	
R7663	ERJ6GEYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R7664	ERJ6GEYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R7671,72	ERJ6GEYJ473	M.RESISTOR CH 1/10W 47K	2	
R7673	ERJ6GEYJ104	M.RESISTOR CH 1/10W 100K	1	
R7674	ERJ6GEYF124	M.RESISTOR CH 1/10W 120K	1	
R7675	ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	
R7676	ERG1SJ152	M.RESISTOR 1W 1.5K	1	
R7677	ERDS2TJ103	C.RESISTOR 1/4W 10K	1	
R7678	ERJ6GEYJ223	M.RESISTOR CH 1/10W 22K	1	
R7679	ERDS2TJ100	C.RESISTOR 1/4W 10	1	
R7680	ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R7681,82	ERJ6GEYJ473	M.RESISTOR CH 1/10W 47K	2	
R7683	ERJ6GEYJ563	M.RESISTOR CH 1/10W 56K	1	
R7684	ERJ6GEYJ393	M.RESISTOR CH 1/10W 39K	1	
R7691	ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	
R7692	ERJ6GEYJ104	M.RESISTOR CH 1/10W 100K	1	
R7693	ERJ6GEYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R7694	ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	
R7695	ERJ6GEYJ562	M.RESISTOR CH 1/10W 5.6K	1	
R7696	ERJ6GEYJ473	M.RESISTOR CH 1/10W 47K	1	
R7901	ERJ3GEYJ471	M.RESISTOR CH 1/16W 470	1	
R7902	ERJ3GEYJ821	M.RESISTOR CH 1/16W 820	1	
R7903	ERJ3GEYJ472	M.RESISTOR CH 1/16W 4.7K	1	
R7904	ERJ6GEYJ152	M.RESISTOR CH 1/10W 1.5K	1	
R7905	ERJ6GEYJ471	M.RESISTOR CH 1/10W 470	1	
R7906	ERJ6GEYJ150	M.RESISTOR CH 1/10W 15	1	
R7907	ERJ6GEYJ561	M.RESISTOR CH 1/10W 560	1	
R7908	ERJ6GEYJ152	M.RESISTOR CH 1/10W 1.5K	1	
R7909-11	ERJ6GEYJ331	M.RESISTOR CH 1/10W 330	3	
R7913-15	ERJ3GEYJ682	M.RESISTOR CH 1/16W 6.8K	3	
R7917	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	
R7918-21	ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	4	
R7922	ERJ3GEYJ563	M.RESISTOR CH 1/16W 56K	1	
R7923	ERJ3GEYJ394	M.RESISTOR CH 1/16W 390K	1	
R7924-26	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	3	
R7927	ERJ3GEYJ562	M.RESISTOR CH 1/16W 5.6K	1	
R7928	ERJ3GEYJ102	M.RESISTOR CH 1/16W 1K	1	
R7929	ERJ3GEYJ563	M.RESISTOR CH 1/16W 56K	1	
R7930	ERJ3GEYJ394	M.RESISTOR CH 1/16W 390K	1	
R7931-33	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	3	
R7934	ERJ3GEYJ562	M.RESISTOR CH 1/16W 5.6K	1	
R7935	ERJ3GEYJ102	M.RESISTOR CH 1/16W 1K	1	
R7936	ERJ3GEYJ223	M.RESISTOR CH 1/16W 22K	1	
R7937	ERJ3GEYJ393	M.RESISTOR CH 1/16W 39K	1	
R7938	ERJ3GEYJ222	M.RESISTOR CH 1/16W 2.2K	1	
R7939	ERJ3GEYJ224	M.RESISTOR CH 1/16W 220K	1	
R7940	ERJ3GEYJ181	M.RESISTOR CH 1/16W 180	1	
R7941	ERJ3GEYJ681	M.RESISTOR CH 1/16W 680	1	
R7942	ERJ3GEYJ393	M.RESISTOR CH 1/16W 39K	1	
R7943	ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	1	
R7944	ERJ3GEYJ392	M.RESISTOR CH 1/16W 3.9K	1	
R7945	ERJ3GEYJ822	M.RESISTOR CH 1/16W 8.2K	1	
R7946,47	ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	2	
R7948	ERJ3GEYJ332	M.RESISTOR CH 1/16W 3.3K	1	
R7949	ERJ3GEYJ822	M.RESISTOR CH 1/16W 8.2K	1	
R7950	ERJ3GEYJ332	M.RESISTOR CH 1/16W 3.3K	1	
R7951	ERJ3GEYJ822	M.RESISTOR CH 1/16W 8.2K	1	
R7956	ERJ3GEYJ822	M.RESISTOR CH 1/16W 8.2K	1	
R7957	ERJ3GEYJ332	M.RESISTOR CH 1/16W 3.3K	1	
R7958,59	ERJ3GEYJ823	M.RESISTOR CH 1/16W 82K	2	
R7960,61	ERJ6GEYJ471	M.RESISTOR CH 1/10W 470	2	
R7962,63	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	2	
R7964	ERJ3GEYJ272	M.RESISTOR CH 1/16W 2.7K	1	
R7969-72	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	4	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
R7973-77	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	5	
R7978	ERJ3GEYJ104	M.RESISTOR CH 1/16W 100K	1	
R7979	ERJ3GEYJ152	M.RESISTOR CH 1/16W 1.5K	1	
R7980	ERJ3GEYJ104	M.RESISTOR CH 1/16W 100K	1	
R7981,82	ERJ3GEYJ102	M.RESISTOR CH 1/16W 1K	2	
R7983	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	
R7985	ERJ3GEYJ181	M.RESISTOR CH 1/16W 180	1	
R7987	ERJ3GEYJ563	M.RESISTOR CH 1/16W 56K	1	
R7988	ERJ3GEYJ121	M.RESISTOR CH 1/16W 120	1	
R7989	ERDS2TJ823	C.RESISTOR 1/4W 82K	1	
RX3401	EXBF8E102J	RESISTOR-RESISTOR	1	
SW3901	VSS0385	SWITCH	1	
T703	EIV5EC045A	TRANSFORMER	1	
T704	EIV5EC047A	TRANSFORMER	1	
T711	EIS5EC008A	TRANSFORMER	1	
T4701	VLT0695	TRANSFORMER	1	
T4702	VLT0696	TRANSFORMER	1	
TR	VJS3481	CONNECTOR (FEMALE)	1	
VR301	EVN49CA00B23	V.RESISTOR 2K	1	
VR302	EVN49CA00B13	V.RESISTOR	1	
VR303	EVNCBAA00B13	V.RESISTOR	1	
VR304	EVN49CA00B13	V.RESISTOR	1	
VR701	EVNCBAA00B53	V.RESISTOR	1	
VR751	EVNCBAA00B53	V.RESISTOR	1	
VR801,02	EVMEASA00B13	V.RESISTOR	2	
VR803	EVMEASA00B14	V.RESISTOR	1	
VR804	EVN49CA00B53	V.RESISTOR	1	
VR2001-05	EVNDXAA00B54	V.RESISTOR 50K	5	
VR3001-03	EVNDXAA00B23	V.RESISTOR 5K	3	
VR3301	EVMF6SA00B24	V.RESISTOR 20K	1	
VR3302	EVN49CA00B54	V.RESISTOR	1	
VR3304,05	EVN49CA00B52	V.RESISTOR 500	2	
VR3307	EVN49CA00B54	V.RESISTOR	1	
VR3901	EVMEASA00B24	V.RESISTOR	1	
VR4002	EVNDXAA00B25	V.RESISTOR 200K	1	
VR4501	EVMECSA00B53	V.RESISTOR	1	
VR4502	EVMEASA00BY4	V.RESISTOR	1	
VR4507	EVMEASA00BY4	V.RESISTOR	1	
VR4509	EVMECSA00BY3	V.RESISTOR	1	
VR4512	EVNCBAA00B52	V.RESISTOR	1	
VR4550	EVMECSA00BS3	V.RESISTOR	1	
VR4551,52	EVMEASA00B55	V.RESISTOR	2	
VR7660	EVNCBAA00B23	V.RESISTOR	1	
VR7901,02	EVNCBAA00B14	V.RESISTOR	2	
VR7903	EVTEASA00B55	V.RESISTOR	1	
X710	EFCH39MGQ1	CRYSTAL OSCILLATOR	1	
X711	EFCS6M65MW3B	CRYSTAL OSCILLATOR	1	
X712	EFCS6R0MS5	CRYSTAL OSCILLATOR	1	
X801	VSX0406	CRYSTAL OSCILLATOR	1	
X3302	EF0GC3584A5	CRYSTAL OSCILLATOR	1	
X3501	VSX0574	CRYSTAL OSCILLATOR	1	
X6001	VSX0583	CRYSTAL OSCILLATOR	1	
X6002	EF0EC7374T4E	CRYSTAL OSCILLATOR	1	
X7001	VSQ0565	CRYSTAL OSCILLATOR	1	
X7901	VSX0513	CRYSTAL OSCILLATOR	1	
X7902	VSX0512	CRYSTAL OSCILLATOR	1	
X7903	EFCA6004BF	CRYSTAL OSCILLATOR	1	
		MISCELLANEOUS		
	VEK6605	EARTH WIRE	1	(TV DEMODU.-POWER SHIELD CASE)
	VJH0684	RF ANT TERMINAL PLATE	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
	VEE8682	WIRE CABLE	1	(P1001-P1102)
	VEE8683	WIRE CABLE	1	(P1002-P1103)
	VEE8688	WIRE CABLE	1	(P2001-P2902)
	VEE9001	WIRE CABLE	1	(POWER TR.-P2003)
	VEE8685	WIRE CABLE	1	(P4002-P6502)
	VEE8686	WIRE CABLE	1	(P6003-P7504)
	VEE8837	WIRE CABLE	1	(P3002-P7503)
	VWJ0775	FLAT CARD CABLE	1	(P2004-P1507)
	VWJ0776	FLAT CARD CABLE	1	(P3001-P501)
	VWJ0778	FLAT CARD CABLE	1	(P7401-P7501)
	VWJ0801	FLAT CARD CABLE	1	(P7402-P7502)
	VMA6768	EARTH ANGLE	1	
	VJF1031	CLAMPER	1	
	VEE8687	WIRE CABLE	1	(P4003-P1509)
	VEE8834	WIRE CABLE	1	(P3003-P9001)
	VEE8835	WIRE CABLE	1	(P6004-P9002)
	VMT0506	SPACER	1	
	ENV87837H3Y	TUNER	1	<!>FOR TV DEMODU.
	ENC17990	RF CONVERTER	1	<!>FOR TV DEMODU.
	VSC4025	SHIELD COVER (MAIN)	1	FOR TV DEMODULATOR
	VSC3241	SHIELD COVER (TOP)	1	FOR TV DEMODULATOR
	VEE9138	WIRE CABLE	1	(TV DEMODU-AFC DEF)
	VMX2233	SPACER	1	FOR SUB LUMI. & CHRO.
	VEJ1465	JACK PIATE	1	FOR I/O PACK C.B.A.
	XTV3+8GFZ	SCREW	4	FOR I/O PACK C.B.A.
	VSC3553	SHILED COVER (MAIN)	1	FOR NICAM DECORDER
	VSC3554	SHILED COVER (TOP)	1	FOR NICAM DECORDER
	VSC3555	SHILED COVER (BOTTOM)	1	FOR NICAM DECORDER
■	VEP03A37L	MAIN C.B.A.		(RTL)NV-HS1000EC
C301	ECUM1H820JCN	C.CAPACITOR CH 50V 82P	1	
C303	ECUM1H180JCN	C.CAPACITOR CH 50V 18P	1	
C305	ECUM1H560JCN	C.CAPACITOR CH 50V 56P	1	
C306	ECUM1H150JCN	C.CAPACITOR CH 50V 15P	1	
C307	ECUM1H470JCN	C.CAPACITOR CH 50V 47P	1	
C308	ECUM1H050CCN	C.CAPACITOR CH 50V 5P	1	
C309	ECUM1H562KBN	C.CAPACITOR CH 50V 5600P	1	
C310	ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C311	ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C312	ECEA0JKA470	E.CAPACITOR 6.3V 47U	1	
C313	ECEA0JKA101	E.CAPACITOR 6.3V 100U	1	
C314	ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C315,16	ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	2	
C317	ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C318	ECEA0JKA101	E.CAPACITOR 6.3V 100U	1	
C319	ECUM1H080DCN	C.CAPACITOR CH 50V 8P	1	
C321,22	ECUM1H680JCN	C.CAPACITOR CH 50V 68P	2	
C324	ECEA0JKA101	E.CAPACITOR 6.3V 100U	1	
C325,26	ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	2	
C329	ECQV1H334JM	P.CAPACITOR 50V 0.33U	1	
C331	ECEA1CKA470	E.CAPACITOR 16V 47U	1	
C332,33	ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	2	
C334	ECEA1CKA470	E.CAPACITOR 16V 47U	1	
C335	ECEA0JKA220	E.CAPACITOR 6.3V 220U	1	
C336	ECEA1EKN4R7	E.CAPACITOR 25V 4.7U	1	
C337	ECEA1HKN010	E.CAPACITOR 50V 1U	1	
C338	ECEA1CKA100	E.CAPACITOR 16V 10U	1	
C339	ECEA0JKA470	E.CAPACITOR 6.3V 47U	1	
C340	ECEA0JKA220	E.CAPACITOR 6.3V 22U	1	
C341	ECEA1CKA100	E.CAPACITOR 16V 10U	1	
C342	ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C343	ECEA1CKA470	E.CAPACITOR 16V 47U	1	
C344	ECEA1CKN100	E.CAPACITOR 16V 10U	1	
C345,46	ECEA1CKA100	E.CAPACITOR 16V 10U	2	
C348	ECEA1HKA010	E.CAPACITOR 50V 1U	1	
C349	ECEA1CKA101	E.CAPACITOR 16V 100U	1	
C350	ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C701-03	ECEA1EK4R7	E.CAPACITOR 25V 4.7U	3	
C707	ECEA1HK0R1	E.CAPACITOR 50V 0.1U	1	
C708	ECEA1CK100	E.CAPACITOR 16V 10U	1	
C710	ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
C719	ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C721	ECQV1H823JM	P.CAPACITOR 50V 0.082U	1	
C723	ECEA1CK100	E.CAPACITOR 16V 10U	1	
C725	ECQV1H104JM	P.CAPACITOR 50V 0.1U	1	
C728	ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C730	ECEA1CK100	E.CAPACITOR 16V 10U	1	
C731	VCEA1CAC100	E.CAPACITOR 16V 10U	1	
C732	ECEA1EK3R3	E.CAPACITOR 25V 3.3U	1	
C736,37	ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	2	
C739	ECUM1H101JCN	C.CAPACITOR CH 50V 100P	1	
C740	ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C741	ECEA1HK010	E.CAPACITOR 50V 1U	1	
C742	ECEA1CK100	E.CAPACITOR 16V 10U	1	
C743	ECUM1H270JSN	C.CAPACITOR CH 50V 27P	1	
C744,45	ECEA1HK0R1	E.CAPACITOR 50V 0.1U	2	
C746	ECUM1H150JCN	C.CAPACITOR CH 50V 15P	1	
C747	ECUM1H680JPN	C.CAPACITOR CH 50V 68P	1	
C748	ECEA1CK470	E.CAPACITOR 16V 47U	1	
C781	ECUM1H120JCN	C.CAPACITOR CH 50V 12P	1	
C782	ECUM1H180JCN	C.CAPACITOR CH 50V 18P	1	
C790	ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C792	ECUM1H220JCN	C.CAPACITOR CH 50V 22P	1	
C802	ECUM1H471JCN	C.CAPACITOR CH 50V 470P	1	
C803	ECEA0JKA221	E.CAPACITOR 6.3V 220U	1	
C804	ECUM1H820JCN	C.CAPACITOR CH 50V 82P	1	
C805,06	ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	2	
C808	ECUM1H680JCN	C.CAPACITOR CH 50V 68P	1	
C809	ECEA1HKA4R7	E.CAPACITOR 50V 4.7U	1	
C810	ECEA0JKA221	E.CAPACITOR 6.3V 220U	1	
C811-13	ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	3	
C814	ECEA0JKA101	E.CAPACITOR 6.3V 100U	1	
C815	ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C816	ECUM1H470JCN	C.CAPACITOR CH 50V 47P	1	
C817	ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C818	ECEA1HKA0R1	E.CAPACITOR 50V 0.1U	1	
C819	ECQB1H332JZ	F.CAPACITOR 50V 3300P	1	
C820	ECUM1H331JCN	C.CAPACITOR CH 50V 330P	1	
C821-23	ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	3	
C824	ECUM1H470JCN	C.CAPACITOR CH 50V 47P	1	
C825-27	ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	3	
C828,29	ECUM1H560JCN	C.CAPACITOR CH 50V 56P	2	
C830	ECUM1H471JCN	C.CAPACITOR CH 50V 470P	1	
C831	ECUM1H270JCN	C.CAPACITOR CH 50V 27P	1	
C832	ECQV1H154JM	P.CAPACITOR 50V 0.15U	1	
C833	ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C834	ECUM1H151JCN	C.CAPACITOR CH 50V 150P	1	
C835	ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C836	ECUM1H560JCN	C.CAPACITOR CH 50V 56P	1	
C1002	ECEA1CKA101	E.CAPACITOR 16V 100U	1	
C1003	ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C2001	ECEA1CKA470	E.CAPACITOR 16V 47U	1	
C2003	ECEA0JKA470	E.CAPACITOR 6.3V 47U	1	
C2005	ECEA1CKA470	E.CAPACITOR 16V 47U	1	
C2006	ECEA1HKAR47	E.CAPACITOR 50V 0.47U	1	
C2007	ECQV1H683JM	P.CAPACITOR 50V 0.068U	1	
C2009	ECUM1H101JCN	C.CAPACITOR CH 50V 100P	1	
C2010	ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C2501-04	ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	4	
C2505	ECEA1CKA470	E.CAPACITOR 16V 47U	1	
C2506	ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C2507	ECQV1H683JM	P.CAPACITOR 50V 0.068U	1	
C2508-10	ECEA1HKA2R2	E.CAPACITOR 50V 2.2U	3	
C2511-14	VCUV1H333KBN	CAPACITOR	4	
C2515	ECEA1HKA010	E.CAPACITOR 50V 1U	1	
C2516	ECEA1HKAR22	E.CAPACITOR 50V 0.22U	1	
C2517	ECA0JM221	E.CAPACITOR 6.3V 220U	1	
C2518	ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C2519,20	VCUV1H333KBN	CAPACITOR	2	
C2521	ECEA1CKA470	E.CAPACITOR 16V 47U	1	
C2522	ECEA1HKNR47	E.CAPACITOR 50V 0.47U	1	
C2523	ECUM1H680JCN	C.CAPACITOR CH 50V 68P	1	
C2524,25	ECUM1C105ZFN	C.CAPACITOR CH 16V 1U	2	
C2526	ECA0JM221	E.CAPACITOR 6.3V 220U	1	
C2527	ECUM1H330JCN	C.CAPACITOR CH 50V 33P	1	
C2528	ECEA1HKNR47	E.CAPACITOR 50V 0.47U	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
C2529	ECEA1CKA101	E.CAPACITOR 16V 100U	1	
C2530	ECEA1HKN010	E.CAPACITOR 50V 1U	1	
C2531	ECUM1E224ZFN	C.CAPACITOR CH 25V 0.22U	1	
C2532	ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C2533	ECEA0JKA330	E.CAPACOTOR 6.3V 33U	1	
C2534,35	ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	2	
C3001	ECUM1H471JCN	C.CAPACITOR CH 50V 470P	1	
C3002	ECUM1H470JCN	C.CAPACITOR CH 50V 47P	1	
C3003-06	ECEA1HKA010	E.CAPACITOR 50V 1U	4	
C3007,08	ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	2	
C3009	ECEA1CKA100	E.CAPACITOR 16V 10U	1	
C3010	ECA1AM331	E.CAPACITOR 10V 330U	1	
C3011	ECEA1CKA100	E.CAPACITOR 16V 10U	1	
C3012	ECA1AM331	E.CAPACITOR 10V 330U	1	
C3013	ECA0JM331	E.CAPACITOR 6.3V 330U	1	
C3014	ECEA1HKA010	E.CAPACITOR 50V 1U	1	
C3015	ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C3016	ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C3017-19	ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	3	
C3022	ECEA0JKA470	E.CAPACITOR 6.3V 47U	1	
C3023,24	ECEA1AKA330	E.CAPACITOR 10V 33U	2	
C3027,28	ECUM1H102KBN	C.CAPACITOR CH 50V 1000P	2	
C3029	ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C3030	ECEA0JKA470	E.CAPACITOR 6.3V 47U	1	
C3031	ECUM1H102KBN	C.CAPACITOR CH 50V 1000P	1	
C3032	ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C3033	ECUM1H102KBN	C.CAPACITOR CH 50V 1000P	1	
C3301	ECUM1H100DCN	C.CAPACITOR CH 50V 10P	1	
C3302	ECUM1H820JCN	C.CAPACITOR CH 50V 82P	1	
C3304-08	ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	5	
C3309	ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C3310	ECEA0JKA470	E.CAPACITOR 6.3V 47U	1	
C3312-14	ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	3	
C3321	ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C3322	ECUM1H180JCN	C.CAPACITOR CH 50V 18P	1	
C3323	ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C3324	ECUM1H150JCN	C.CAPACITOR CH 50V 15P	1	
C3325	ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C3326	ECUM1H150JCN	C.CAPACITOR CH 50V 15P	1	
C3327,28	ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	2	
C3329	ECEA0JKA470	E.CAPACITOR 6.3V 47U	1	
C3330	ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C3336	ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C3337	ECUM1H060DCN	C.CAPACITOR CH 50V 6P	1	
C3338	ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C3339	ECUM1H330JCN	C.CAPACITOR CH 50V 33P	1	
C3340	ECUM1H101JCN	C.CAPACITOR CH 50V 100P	1	
C3341	ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C3342	ECUM1H680JCN	C.CAPACITOR CH 50V 68P	1	
C3343	ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C3344	ECUM1H560JCN	C.CAPACITOR CH 50V 56P	1	
C3345	ECUM1H391JCN	C.CAPACITOR CH 50V 390P	1	
C3346	ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C3347	ECUM1H560JCN	C.CAPACITOR CH 50V 56P	1	
C3351,52	ECUM1H181JCN	C.CAPACITOR CH 50V 180P	2	
C3353	ECUM1H180JCN	C.CAPACITOR CH 50V 18P	1	
C3354	ECUM1H220JCN	C.CAPACITOR CH 50V 22P	1	
C3372	ECEA1HKA3R3	E.CAPACITOR 50V 3.3U	1	
C3401	ECUM1H470JCN	C.CAPACITOR CH 50V 47P	1	
C3402	ECUM1H080DCN	C.CAPACITOR CH 50V 8P	1	
C3403-07	ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	5	
C3408,09	ECUM1H102KBN	C.CAPACITOR CH 50V 1000P	2	
C3421	ECUM1H472KBN	C.CAPACITOR CH 50V 4700P	1	
C3422	ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C3423	ECUM1H050CCN	C.CAPACITOR CH 50V 5P	1	
C3424	ECUM1H680JCN	C.CAPACITOR CH 50V 68P	1	
C3425	ECEA0JKA470	E.CAPACITOR 6.3V 47U	1	
C3426	ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C3427	ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C3428	ECEA0JKA470	E.CAPACITOR 6.3V 47U	1	
C3429	ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C3430	ECEA0JKA330	E.CAPACOTOR 6.3V 33U	1	
C3431	ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C3443	ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C3444	ECEA0JKA470	E.CAPACITOR 6.3V 47U	1	
C3445	ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C3447	ECUM1H121JCN	C.CAPACITOR CH 50V 120P	1	
C3448	ECUM1H151JCN	C.CAPACITOR CH 50V 150P	1	
C3449	ECUM1H180JCN	C.CAPACITOR CH 50V 18P	1	
C3450,51	ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	2	
C3452	ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C3472	ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C3473	ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C3474	ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C3475-77	ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	3	
C3501	ECA0JM471	E.CAPACITOR 6.3V 470U	1	
C3502	ECRHA030E54R	V.CAPACITOR	1	
C3503	ECUM1H330JCN	C.CAPACITOR CH 50V 33P	1	
C3504	ECQB1H223JF	P.CAPACITOR 50V 0.022U	1	
C3505	ECEA1HKN010	E.CAPACITOR 50V 1U	1	
C3506	ECQB1H682JZ	F.CAPACITOR 50V 6800P	1	
C3507	ECUM1H102KBN	C.CAPACITOR CH 50V 1000P	1	
C3508	ECEA1HKA3R3	E.CAPACITOR 50V 3.3U	1	
C3509	ECUM1H122KBN	C.CAPACITOR CH 50V 1200P	1	
C3510	ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C3511	ECUM1H101JCN	C.CAPACITOR CH 50V 100P	1	
C3512	ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C3513	ECUM1H080DCN	C.CAPACITOR CH 50V 8P	1	
C3514,15	ECEA1CKA100	E.CAPACITOR 16V 10U	2	
C3516,17	ECUM1H180JCN	C.CAPACITOR CH 50V 18P	2	
C3518	ECEA1HKAR47	E.CAPACITOR 50V 0.47U	1	
C3519	ECUM1H221JCN	C.CAPACITOR CH 50V 220P	1	
C3520	ECEA1CKA330	E.CAPACITOR 16V 33U	1	
C3521	ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C3522	ECEA1CKA330	E.CAPACITOR 16V 33U	1	
C3523	ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C3524	ECEA1HKA010	E.CAPACITOR 50V 1U	1	
C3525-27	ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	3	
C3528	ECEA1HKA010	E.CAPACITOR 50V 1U	1	
C3529	ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C3530	ECUM1H330JCN	C.CAPACITOR CH 50V 33P	1	
C3531	ECUM1H150JCN	C.CAPACITOR CH 50V 15P	1	
C3532	ECUM1H330JCN	C.CAPACITOR CH 50V 33P	1	
C3533	ECEA0JKA221	E.CAPACITOR 6.3V 220U	1	
C3534	ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C3601	ECUM1H100DCN	C.CAPACITOR CH 50V 10P	1	
C3602	ECUM1H220JCN	C.CAPACITOR CH 50V 22P	1	
C3603	ECUM1H330JCN	C.CAPACITOR CH 50V 33P	1	
C3604	ECUM1H180JCN	C.CAPACITOR CH 50V 18P	1	
C3605	ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C3606	ECUM1H681JCN	C.CAPACITOR CH 50V 680P	1	
C3607	ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C3608	ECEA1CKA100	E.CAPACITOR 16V 10U	1	
C3609	ECUM1H271JCN	C.CAPACITOR CH 50V 270P	1	
C3610	ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C3611,12	ECUM1H100DCN	C.CAPACITOR CH 50V 10P	2	
C3613	ECUM1H181JCN	C.CAPACITOR CH 50V 180P	1	
C3614	ECUM1H680JCN	C.CAPACITOR CH 50V 68P	1	
C3901-05	ECEA1CKA100	E.CAPACITOR 16V 10U	5	
C3906	ECEA0JKA470	E.CAPACITOR 6.3V 47U	1	
C3907	ECEA1CKA470	E.CAPACITOR 16V 47U	1	
C3908	ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C3909,10	ECA1AM471	E.CAPACITOR 10V 470U	2	
C3911	ECUM1H332KBN	C.CAPACITOR CH 50V 3300P	1	
C3912	ECEA0JKA101	E.CAPACITOR 6.3V 100U	1	
C3913	ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C3914	ECEA1EK3R3	E.CAPACITOR 25V 3.3U	1	
C3915	ECEA1CKN100	E.CAPACITOR 16V 10U	1	
C3916	ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C3917	ECEA1CKN100	E.CAPACITOR 16V 10U	1	
C3918	ECEA1CKA470	E.CAPACITOR 16V 47U	1	
C3919	ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C3922	ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C3923	ECEA1CKA100	E.CAPACITOR 16V 10U	1	
C3924	ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C3927	ECEA1CKA470	E.CAPACITOR 16V 47U	1	
C4001,02	ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	2	
C4003,04	ECEA1CKA100	E.CAPACITOR 16V 10U	2	
C4005	ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C4006	ECUM1C224ZFN	C.CAPACITOR CH 16V 0.22U	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
C4007	ECEA1CPZ101	E.CAPACITOR 16V 100U	1	
C4008	ECUM1C224ZFN	C.CAPACITOR CH 16V 0.22U	1	
C4009	ECEA1CPZ101	E.CAPACITOR 16V 100U	1	
C4010	ECUM1H222KBN	C.CAPACITOR CH 50V 2200P	1	
C4011,12	ECUM1H122KBN	C.CAPACITOR CH 50V 1200P	2	
C4501	ECQB1H152JH	P.CAPACITOR 50V 1500P	1	
C4502	ECUM1C104ZFN	C.CAPACITOR CH 16V 0.1U	1	
C4503	ECUX1H152KBV	C.CAPACITOR CH 50V 1500P	1	
C4504,05	ECEA1CPZ470	E.CAPACITOR 16V 47U	2	
C4506	VCEA1CAH100	E.CAPACITOR 16V 10U	1	
C4507	ECQB1H223JA	P.CAPACITOR 50V 0.022U	1	
C4508	ECEA1EBZ4R7	E.CAPACITOR 25V 4.7U	1	
C4509	ECEA1APZ470	E.CAPACITOR 10V 47U	1	
C4510	ECQB1H103JA	P.CAPACITOR 50V 0.01U	1	
C4511	ECQB1H332JA	P.CAPACITOR 50V 3300P	1	
C4512	ECUX1H561JV	C.CAPACITOR CH 50V 560P	1	
C4513	ECUM1H681JN	C.CAPACITOR CH 50V 680P	1	
C4514	ECUM1H561JN	C.CAPACITOR CH 50V 560P	1	
C4515	VCEA1EAH4R7	E.CAPACITOR 25V 4.7U	1	
C4517	ECEA1APZ101	E.CAPACITOR 10V 100U	1	
C4518	ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C4521	ECUM1C473KBV	C.CAPACITOR CH 16V 0.047U	1	
C4522	VCEA1HAH3R3	E.CAPACITOR 50V 3.3U	1	
C4528	ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C4530	ECEA0JPK470	E.CAPACITOR 6.3V 47U	1	
C4533	ECEA1CPZ330	E.CAPACITOR 16V 33U	1	
C4537	ECUM1H102JCN	C.CAPACITOR CH 50V 1000P	1	
C4538	ECEA1HUR47	E.CAPACITOR 50V 0.47U	1	
C4539	ECUM1C224ZFN	C.CAPACITOR CH 16V 0.22U	1	
C4541	ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C4545	ECUM1H102KBN	C.CAPACITOR CH 50V 1000P	1	
C4552	ECUM1C104ZFN	C.CAPACITOR CH 16V 0.1U	1	
C4556	VCEA1CAH100	E.CAPACITOR 16V 10U	1	
C4557	ECQB1H223JA	P.CAPACITOR 50V 0.022U	1	
C4558	ECEA1EBZ4R7	E.CAPACITOR 25V 4.7U	1	
C4559	ECEA1APZ470	E.CAPACITOR 10V 47U	1	
C4560	ECQB1H103JA	P.CAPACITOR 50V 0.01U	1	
C4561	ECQB1H332JA	P.CAPACITOR 50V 3300P	1	
C4562	ECUM1H561JN	C.CAPACITOR CH 50V 560P	1	
C4563	ECUM1H681JN	C.CAPACITOR CH 50V 680P	1	
C4564	ECUM1H561JN	C.CAPACITOR CH 50V 560P	1	
C4565	VCEA1EAH4R7	E.CAPACITOR 25V 4.7U	1	
C4567	ECEA1APZ101	E.CAPACITOR 10V 100U	1	
C4568	ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C4572	VCEA1HAH3R3	E.CAPACITOR 50V 3.3U	1	
C4576	ECUM1E473KBN	C.CAPACITOR CH 25V 0.047U	1	
C4583	ECEA1CPZ330	E.CAPACITOR 16V 33U	1	
C4585,86	ECEA1APZ101	E.CAPACITOR 10V 100U	2	
C4591	ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C4592	ECUX1H152KBV	C.CAPACITOR CH 50V 1500P	1	
C4604	ECUM1H182JN	C.CAPACITOR CH 50V 1800P	1	
C4606	VCEA0JAC470	E.CAPACITOR 6.3V 47U	1	
C4611	ECQB1H182JZ	F.CAPACITOR 50V 1800P	1	
C4613	ECUM1H821JCN	C.CAPACITOR CH 50V 820P	1	
C4616	ECUX1H102ZFV	C.CAPACITOR CH 50V 1000P	1	
C4617	ECEA10M22	E.CAPACITOR 10V 22U	1	
C4618	ECQB1H822JH	P.CAPACITOR 50V 8200P	1	
C4619	ECEA1APB100	E.CAPACITOR 10V 10U	1	
C4621	ECEA0JPK101	E.CAPACITOR 6.3V 100U	1	
C4629	ECQB1H562JZ	P.CAPACITOR 50V 5600P	1	
C4636	ECUM1H471JN	C.CAPACITOR CH 50V 470P	1	
C4638	ECQB1H822JH	P.CAPACITOR 50V 8200P	1	
C4651	ECQB1H333JA	P.CAPACITOR 50V 0.033U	1	
C4652,53	ECUM1C105ZFN	C.CAPACITOR CH 16V 1U	2	
C4701	ECCD2H181J	C.CAPACITOR 500V 180P	1	
C4702	ECQP1222JZ	P.CAPACITOR 0.0022U	1	
C4703	ECQB1H102JF	P.CAPACITOR 50V 1000P	1	
C4704	ECQB1H103JF	P.CAPACITOR 50V 0.01U	1	
C4705	ECEA16M33	E.CAPACITOR 16V 33U	1	
C4706	ECQV1H104JM	P.CAPACITOR 50V 0.1U	1	
C4707	ECQB1H223JF	P.CAPACITOR 50V 0.022U	1	
C4708	ECEA1CKA100	E.CAPACITOR 16V 10U	1	
C4709	ECQB1H472JF	P.CAPACITOR 50V 4700P	1	
C4710	ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C4711,12	ECEA1AKA220	E.CAPACITOR 10V 22U	2	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
C4713	ECEA1HKA3R3	E.CAPACITOR 50V 3.3U	1	
C4714	ECEA1CKA101	E.CAPACITOR 16V 100U	1	
C4901,02	ECQB1H103JZ	F.CAPACITOR 50V 0.01U	2	
C4903,04	ECQB1H332JZ	F.CAPACITOR 50V 3300P	2	
C4905,06	VCEA1CAD100	CAPACITOR	2	
C4907,08	ECUM1H101JCN	C.CAPACITOR CH 50V 100P	2	
C4909,10	ECQB1H103JZ	F.CAPACITOR 50V 0.01U	2	
C4911,12	ECQB1H332JZ	F.CAPACITOR 50V 3300P	2	
C4913,14	VCEA1CAD100	CAPACITOR	2	
C4915,16	ECUM1H101JCN	C.CAPACITOR CH 50V 100P	2	
C4917,18	ECQB1H103JZ	F.CAPACITOR 50V 0.01U	2	
C4919,20	ECQB1H332JZ	F.CAPACITOR 50V 3300P	2	
C4923,24	VCEA0JAC101	E.CAPASITOR 6.3V 100U	2	
C6001	ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C6002	ECEA0JKA330	E.CAPACITOR 6.3V 33U	1	
C6003	ECEA0JKA470	E.CAPACITOR 6.3V 47U	1	
C6004	ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C6005	ECEA0JKA470	E.CAPACITOR 6.3V 47U	1	
C6006	ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C6007,08	ECUM1H180JCN	C.CAPACITOR CH 50V 18P	2	
C6010	ECUM1H223KBN	C.CAPACITOR CH 50V 0.022U	1	
C6011	ECUM1H472KBN	C.CAPACITOR CH 50V 4700P	1	
C6012	ECUM1H392KBN	C.CAPACITOR CH 50V 3900P	1	
C6013	ECEA0JKA221	E.CAPACITOR 6.3V 220U	1	
C6014	ECQB1H103JF	P.CAPACITOR 50V 0.01U	1	
C6015	ECEA1HKA3R3	E.CAPACITOR 50V 3.3U	1	
C6016,17	ECEA1HKN3R3	E.CAPACITOR 50V 3.3U	2	
C6018	ECEA0JKA221	E.CAPACITOR 6.3V 220U	1	
C6019	ECEA0JKA470	E.CAPACITOR 6.3V 47U	1	
C6020	ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C6021	ECEA16M10	E.CAPACITOR 16V 1U	1	
C6022	ECUM1H222KBN	C.CAPACITOR CH 50V 2200P	1	
C6023	ECEA1HKA3R3	E.CAPACITOR 50V 3.3U	1	
C6024	ECEA1HKA4R7	E.CAPACITOR 50V 4.7U	1	
C6025	ECUM1H392KBN	C.CAPACITOR CH 50V 3900P	1	
C6026	ECUM1H223KBN	C.CAPACITOR CH 50V 0.022U	1	
C6027	ECUM1E104KBN	C.CAPACITOR CH 25V 0.1U	1	
C6028	ECUM1H222KBN	C.CAPACITOR CH 50V 2200P	1	
C6029	ECEA0JKA221	E.CAPACITOR 6.3V 220U	1	
C6030	EECS5R5T224N	E.CAPACITOR 5.5V 0.22U	1	
C6034	ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C6035	ECEA1CKA330	E.CAPACITOR 16V 33U	1	
C6036	ECEA0JKA330	E.CAPACITOR 6.3V 33U	1	
C6037	ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C6038	ECEA1AKA470	E.CAPACITOR 10V 47U	1	
C6040	ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C6041	ECEA0JKA101	E.CAPACITOR 6.3V 100U	1	
C6042	ECEA0JKA470	E.CAPACITOR 6.3V 47U	1	
C6043	ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C6045	ECEA0JKA470	E.CAPACITOR 6.3V 47U	1	
C6046	ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C6049	ECUM1H271JCN	C.CAPACITOR CH 50V 270P	1	
C6050,51	ECUM1H102KBN	C.CAPACITOR CH 50V 1000P	2	
C6053-56	ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	4	
C6062	ECUM1H271JCN	C.CAPACITOR CH 50V 270P	1	
C6063	ECUM1H222KBN	C.CAPACITOR CH 50V 2200P	1	
C7302	ECEA1CKN100	E.CAPACITOR 16V 10U	1	
C7303	ECQV1H393JZ	P.CAPACITOR 50V 0.039U	1	
C7304	ECEA1CKN100	E.CAPACITOR 16V 10U	1	
C7305	ECQV1H473JZ	P.CAPACITOR 50V 0.047U	1	
C7306	ECQB1H102KZ	P.CAPACITOR 50V 1000P	1	
C7307	ECQB1H822KZ	P.CAPACITOR 50V 8200P	1	
C7308	ECQB1H102KZ	P.CAPACITOR 50V 1000P	1	
C7309	ECQB1H152JH	P.CAPACITOR 50V 1500P	1	
C7310	ECEA16M10	E.CAPACITOR 16V 1U	1	
C7311	ECEA50MR47	E.CAPACITOR 50V 0.47U	1	
C7312	ECQV1H224JM	P.CAPACITOR 50V 0.22U	1	
C7313	ECQV1H104JM	P.CAPACITOR 50V 0.1U	1	
C7314	ECQV1H224JM	P.CAPACITOR 50V 0.22U	1	
C7315	ECQV1H104JM	P.CAPACITOR 50V 0.1U	1	
C7316	ECQV1H224JM	P.CAPACITOR 50V 0.22U	1	
C7317	ECEA1CK101	E.CAPACITOR 16V 100U	1	
C7318	ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C7319	ECEA1CK470	E.CAPACITOR 16V 47U	1	
C7320,21	ECEA1CK100	E.CAPACITOR 16V 10U	2	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
C7323,24	ECQV1H393JZ	P.CAPACITOR 50V 0.039U	2	
C7331	ECQV1H474JM	P.CAPACITOR 50V 0.47U	1	
C7332,33	ECUM1H102ZFN	C.CAPACITOR CH 50V 1000P	2	
C7334	ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C7335	ECEA1CK470	E.CAPACITOR 16V 47U	1	
C7336	ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C7337	ECUM1H680JCN	C.CAPACITOR CH 50V 68P	1	
C7339	ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C7340	ECUM1H390JPN	C.CAPACITOR CH 50V 39P	1	
C7341	ECUM1H070DCN	C.CAPACITOR CH 50V 7P	1	
C7342	ECQV1H823JM	P.CAPACITOR 50V 0.082U	1	
C7343	ECEA1CK100	E.CAPACITOR 16V 10U	1	
C7345	ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C7346	ECUM1H390JPN	C.CAPACITOR CH 50V 39P	1	
C7347	ECUM1H070DCN	C.CAPACITOR CH 50V 7P	1	
C7348	ECQV1H393JZ	P.CAPACITOR 50V 0.039U	1	
C7349,50	ECUM1H221JCN	C.CAPACITOR CH 50V 220P	2	
C7351,52	ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	2	
C7353	ECEA1CK470	E.CAPACITOR 16V 47U	1	
C7402,03	ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	2	
C7404	ECEA1CKA100	E.CAPACITOR 16V 10U	1	
C7405,06	ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	2	
C7407,08	ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	2	
C7409	ECEA1CKA100	E.CAPACITOR 16V 10U	1	
C7410	ECEA0JKA101	E.CAPACITOR 6.3V 100U	1	
C7651	ECEA1HKR47	E.CAPACITOR 50V 0.47U	1	
C7652	ECUM1H122KBN	C.CAPACITOR CH 50V 1200P	1	
C7653	ECUM1H153KBN	C.CAPACITOR CH 50V 0.015U	1	
C7654	ECEA1HK010	E.CAPACITOR 50V 1U	1	
C7655	ECQV1H683JM	P.CAPACITOR 50V 0.068U	1	
C7656	ECA1CM471	E.CAPACITOR 16V 470	1	
C7668	ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C7685	ECEA1HK010	E.CAPACITOR 50V 1U	1	
C7901-03	ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	3	
C7904	ECEA1CK470	E.CAPACITOR 16V 47U	1	
C7905	ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	1	
C7906	ECEA1CK470	E.CAPACITOR 16V 47U	1	
C7907	ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	1	
C7908	ECQV1H104JM	P.CAPACITOR 50V 0.1U	1	
C7909	ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	1	
C7910	ECEA1CK100	E.CAPACITOR 16V 10U	1	
C7911-13	ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	3	
C7914	ECEA0JK470	E.CAPACITOR 6.3V 47U	1	
C7915	ECUX1H100DCV	C.CAPACITOR CH 50V 10P	1	
C7916	ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	1	
C7917	ECEA0JK470	E.CAPACITOR 6.3V 47U	1	
C7918	ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	1	
C7919	ECEA0JK470	E.CAPACITOR 6.3V 47U	1	
C7920	ECEA1CK100	E.CAPACITOR 16V 10U	1	
C7921	ECQB1H102JH	P.CAPACITOR 50V 1000P	1	
C7922	ECQB1H272JH	P.CAPACITOR 50V 2700P	1	
C7923	ECUX1H151JCV	C.CAPACITOR CH 50V 150P	1	
C7924	ECEA1CKN100	E.CAPACITOR 16V 10U	1	
C7925	ECUX1H561JCV	C.CAPACITOR CH 50V 560P	1	
C7926	ECEA1CK100	E.CAPACITOR 16V 10U	1	
C7927	ECQB1H102JH	P.CAPACITOR 50V 1000P	1	
C7928	ECQB1H272JH	P.CAPACITOR 50V 2700P	1	
C7929	ECUX1H151JCV	C.CAPACITOR CH 50V 150P	1	
C7930	ECEA1CKN100	E.CAPACITOR 16V 10U	1	
C7931	ECUX1H561JCV	C.CAPACITOR CH 50V 560P	1	
C7932,33	ECEA1CKN100	E.CAPACITOR 16V 10U	2	
C7934	ECUX1H220JCV	C.CAPACITOR CH 50V 22P	1	
C7935	ECUX1H470JCV	C.CAPACITOR CH 50V 47P	1	
C7937	ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	1	
C7938	ECEA1HKR47	E.CAPACITOR 50V 0.47U	1	
C7939,40	ECEA1HKN0R1	E.CAPACITOR 50V 0.1U	2	
C7941	ECEA1HKR47	E.CAPACITOR 50V 0.47U	1	
C7942	ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	1	
C7943	ECUX1H100DCV	C.CAPACITOR CH 50V 10P	1	
C7945	ECUX1H101JCV	C.CAPACITOR CH 50V 100P	1	
C7946	ECUX1H220JCV	C.CAPACITOR CH 50V 22P	1	
C7947	ECEA1HKR47	E.CAPACITOR 50V 0.47U	1	
C7948	ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	1	
C7949	ECEA0JK330	E.CAPACITOR 6.3V 33U	1	
C7950-53	ECEA1CKN100	E.CAPACITOR 16V 10U	4	
C7954	ECEA1CK470	E.CAPACITOR 16V 47U	1	
C7955-60	ECEA1CK100	E.CAPACITOR 16V 10U	6	
C7961	ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	1	
C7963	ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	1	
C7964	ECEA1CK100	E.CAPACITOR 16V 10U	1	
C7965,66	ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	2	
C7967	ECEA1CK100	E.CAPACITOR 16V 10U	1	
D301	1SS283	DIODE	1	
D303	MA151WK	DIODE	1	
D305	1SS254	DIODE	1	
D306	MA723VT	DIODE	1	
D307	1SS254	DIODE	1	
D308,09	MA151WK	DIODE	2	
D710	MA3100L	DIODE	1	
D801-07	1SS254	DIODE	7	
D808	MA151WK	DIODE	1	
D1002	1SS254	DIODE	1	
D2001-05	1SS254	DIODE	5	
D2501-08	1SS254	DIODE	8	
D2510	1SS254	DIODE	1	
D3002	MA28W-A	DIODE	1	
D3003	1SS254	DIODE	1	
D3301	1SS254	DIODE	1	
D3302	MA151K	DIODE	1	
D3304	MA151K	DIODE	1	
D3403	MA723VT	DIODE	1	
D3405	MA151WA	DIODE	1	
D3408	1SS254	DIODE	1	
D3501	1SS254	DIODE	1	
D3502	MA153	DIODE	1	
D3504	MA151WK	DIODE	1	
D3901	1SS254	DIODE	1	
D3902	MA4130L	DIODE	1	
D3903	1SS254	DIODE	1	
D3904	MA151WK	DIODE	1	
D3906	MA151WA	DIODE	1	
D3908,09	1SS254	DIODE	2	
D4003	MA723VT	DIODE	1	
D4004	1SS254	DIODE	1	
D4501,02	MA151H	DIODE	2	
D4503	MA151K	DIODE	1	
D4504	MA151H	DIODE	1	
D4601,02	MA151K	DIODE	2	
D4701-03	1SS254	DIODE	3	
D6001	1SS254	DIODE	1	
D6002	MA723VT	DIODE	1	
D6003	1SS254	DIODE	1	
D6005	MA151WK	DIODE	1	
D6006	MA151WA	DIODE	1	
D6007	MA151WK	DIODE	1	
D6008	MA151WA	DIODE	1	
D6009	11EQS04	DIODE	1	
D6011,12	11EQS04	DIODE	2	
D6013	MA723VT	DIODE	1	
D6014	1SS254	DIODE	1	
D6015	MA723VT	DIODE	1	
D7303	MA28WA	DIODE	1	
D7304	MA3100L	DIODE	1	
D7401	MA723VT	DIODE	1	
D7672,73	MA3150H	DIODE	2	
D7901-03	MA141WK	DIODE	3	
D7904	MA141K	DIODE	1	
D7905	MA141WA	DIODE	1	
D7906	MA141WK	DIODE	1	
D7907	MA141K	DIODE	1	
DL801	EFDUN124A13N	DELAY LINE	1	
DL802	EFDVR645A45A	DELAY LINE	1	
DL803	VLD0147	DELAY LINE	1	
FL301	ELB4M022	FILTER	1	

Ref.No.	Part No.	Part Name & Description		Pcs	Remarks
FL302	VLF0639	FILTER		1	
FL801	VLF1079	FILTER		1	
FL3001	ELB4H020	FILTER		1	
FL3601	ELB4R031	FILTER		1	
FL3901	VLF0766	FILTER		1	
FL3902	VLF0765	FILTER		1	
FL4501	VLF0947M	FILTER		1	
FL7901	VLF0703	FILTER		1	
FL7902	ELKAW103EB	FILTER		1	
FL7904-11	ELKAW103EB	FILTER		8	
FL7912-15	ELKAW101GB	COIL	100UH	4	
FL7916	VLF0633	COIL		1	
FL7918	ELKAW103EB	FILTER		1	
IC301	VEFH20B	HIC		1	
IC302	MN3859S	IC		1	
IC303	AN1358S	IC		1	
IC701	M52014SP	IC		1	
IC801	VCR0380	IC		1	
IC802	M52352FP	IC		1	
IC2001	AN3727S	IC		1	
IC2002	UPD4053BG	IC		1	
IC2501	BA6219B	IC		1	
IC2502	LM358PS	IC		1	
IC2503	XRA6439S	IC		1	
IC2504	LM358PS	IC		1	
IC2505	LM393P	IC		1	
IC3001	AN3581S	IC		1	
IC3002	M52055FP	IC		1	
IC3301	M52083FP	IC		1	
IC3401	NJM2233BMA	IC		1	
IC3403	MN155202VZAM	IC		1	
IC3404	MN1280S	IC		1	
IC3405	UPD4066BG	IC		1	
IC3501	LC74760	IC		1	
IC3502	M52055FP	IC		1	
IC3503	NJM2246DA	IC		1	
IC3504	NJM2233BMA	IC		1	
IC3601	AN6308S	IC		1	
IC3901	M52475AP	IC		1	
IC3902	AN3916	IC		1	
IC3904	AN1393S	IC		1	
IC4001	NJM4565DD	IC		1	
IC4501	XLH7773KS	IC		1	
IC4601	BA7755AF	IC		1	
IC4701	AN1358S	IC		1	
IC4702	MN4066BS	IC		1	
IC4901	LA7155M	IC		1	
IC4902	MN4066BS	IC		1	
IC6001	MN6755320H2D	IC		1	
IC6002	M38024V1BK	IC		1	
IC6003	MN1280S	IC		1	
IC6005	UPD4052BG	IC		1	
IC6007	M6M80041P	IC		1	
IC6008	TL431CLP	IC		1	
IC7301	TDA3803A	IC		1	
IC7302	TA8721SN	IC		1	
IC7401	M66006FP	IC		1	
IC7651	M52306FP	IC		1	
IC7901	TB1204F	IC		1	
IC7902	TA2009F	IC		1	
IC7903	M5238FP	IC		1	
J3901,02	VJS1470	AV 21PIN SCART JACK		2	
L302	VLQ0188J180	COIL	18UH	1	
L304	VLQ0188J270	COIL	27UH	1	
L305	VLQ0188J101	COIL	100UH	1	
L306	VLQ0188J390	COIL	39UH	1	
L309-11	VLQ0188J330	COIL	33UH	3	
L312	VLQ0407101K	COIL	100UH	1	
L701	ELESQ680KA	COIL	68UH	1	

Ref.No.	Part No.	Part Name & Description		Pcs	Remarks
L711	ELQTR22XB	COIL	0.22UH	1	
L718,19	ELESQ680KA	COIL	68UH	2	
L720	ELESQ150KA	COIL	15UH	1	
L781	VLQ0213K680	COIL	68UH	1	
L801,02	ELESE681KA	COIL	680UH	2	
L803	ELESE331KA	COIL	H	1	
L804	VLQ0407101K	COIL	100UH	1	
L806	VLQ0407101K	COIL	100UH	1	
L807,08	VLQ0188J150	COIL	15UH	2	
L809	VLQ0188J330	COIL	33UH	1	
L810	VLQ0188J150	COIL	15UH	1	
L811	VLQ0188J151	COIL	150UH	1	
L812	VLQ0188J270	COIL	27UH	1	
L813,14	VLQ0188J150	COIL	15UH	2	
L2001	VLQ0569	COIL		1	
L2002	ERJ6GMZ0R00	M.RESISTOR CH 1/10W	0	1	
L2501	VLP0074	COIL		1	
L2502	ELESE330KA	COIL		1	
L2503	ELESE102KA	COIL	1000UH	1	
L3001-03	VLQ0188J330	COIL	33UH	3	
L3004	VLQ0398	COIL		1	
L3005-08	VLQ0556	COIL		4	
L3301	VLQ0188J150	COIL	15UH	1	
L3304	VLQ0188J330	COIL	33UH	1	
L3306	VLQ0188J390	COIL	39UH	1	
L3307	VLQ0188J120	COIL	12UH	1	
L3308	VLQ0188J330	COIL	33UH	1	
L3309	VLQ0188J181	COIL	180UH	1	
L3310	VLQ0188J270	COIL	27UH	1	
L3313	ELESE681KA	COIL	680UH	1	
L3315,16	VLQ0188J5R6	COIL	5.6UH	2	
L3318	VLQ0188J330	COIL	33UH	1	
L3323	VLQ0188J330	COIL	33UH	1	
L3401	VLQ0188J150	COIL	15UH	1	
L3404	VLQ0188J220	COIL	22UH	1	
L3405	VLQ0188J330	COIL	33UH	1	
L3412	VLQ0188J330	COIL	33UH	1	
L3415	VLQ0188J120	COIL	12UH	1	
L3501	VLQ0188J330	COIL	33UH	1	
L3502	VLQ0188J5R6	COIL	5.6UH	1	
L3503	VLQ0188J100	COIL	10UH	1	
L3504	VLQ0188J390	COIL	39UH	1	
L3505	VLQ0188J820	COIL	82UH	1	
L3508	VLQ0188J330	COIL	33UH	1	
L3601	VLQEL05S120	COIL	12UH	1	
L3602,03	VLQEL05S101K	COIL	100UH	2	
L3604	VLQEL05S151K	COIL	H	1	
L3605	VLQEL05S820K	COIL	82UH	1	
L3901-04	ELESE101KA	COIL	100UH	4	
L3905	VLQ0188J1R0	COIL	1UH	1	
L4001,02	ELESE101KA	COIL	100UH	2	
L4501,02	ELESQ101KA	COIL	100UH	2	
L4601	VLQEL07F153J	COIL	15MH	1	
L4701	ELESE471KA	COIL		1	
L4702	ELESE101KA	COIL	100UH	1	
L4901,02	ELESE102KA	COIL	1000UH	2	
L4903,04	ELESE101KA	COIL	100UH	2	
L4905,06	ELESE102KA	COIL	1000UH	2	
L4907,08	ELESE101KA	COIL	100UH	2	
L4909,10	ELESE102KA	COIL	1000UH	2	
L6001	VLP0083	COIL		1	
L6002	ELESE101KA	COIL	100UH	1	
L6003	VLP0083	COIL		1	
L6007,08	VLP0083	COIL		2	
L6009	ELESE101KA	COIL	100UH	1	
L7301	ELESQ102KA	COIL	1000UH	1	
L7401-03	VLQ0188J330	COIL	33UH	3	
L7404	VLQ0540J330	COIL	33UH	1	
L7405	VLQ0188J1R0	COIL	1UH	1	
L7901,02	VLP0083	COIL		2	
P1001	VJP2593	CONNECTOR (MALE)		1	
P1001	VJS2593	CONNECTOR (FEMALE)		1	
P1002	VJP1142	CONNECTOR (MALE)	3P	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
P1002	VJS1142	CONNECTOR (FEMALE)	1	
P1102	VJS1932	CONNECTOR (FEMALE)	1	
P1103	VJS1142	CONNECTOR (FEMALE)	1	
P1509	VJS1141	CONNECTOR (FEMALE)	1	
P2001	VJP1232T	CONNECTOR (MALE) 5P	1	
P2001	VJS1738T	CONNECTOR (FEMALE)	1	
P2003	VJP3502	CONNECTOR (MALE)	1	
P2003	VJS3482	CONNECTOR (FEMALE)	1	
P2004	VJS3537A015G	CONNECTOR (FEMALE) 15P	1	
P2902	VJS1738T	CONNECTOR (FEMALE)	1	
P3001	VJS3537A020G	CONNECTOR (FEMALE) 20P	1	
P3002	VJP3233A010	CONNECTOR (MALE) 10P	1	
P3002	VJS3366Z010	CONNECTOR (FEMALE) 10P	1	
P3003	VJF0171	CONNECTOR	1	
P3003	VJP1393T	CONNECTOR (MALE) 13P	1	
P4001	VJS2331	CONNECTOR (FEMALE)	1	
P4002	VJP1238T	CONNECTOR (MALE) 11P	1	
P4002	VJS1744T	CONNECTOR (FEMALE)	1	
P4003	VJP1230T	CONNECTOR (MALE) 3P	1	
P4003	VJS1230	CONNECTOR (FEMALE)	1	
P6001	VJS3537A014G	CONNECTOR (FEMALE) 14P	1	
P6003	VJP1233T	CONNECTOR (MALE) 6P	1	
P6003	VJS1739T	CONNECTOR (FEMALE)	1	
P6004	VJP1235T	CONNECTOR (MALE) 8P	1	
P6004	VJS1741T	CONNECTOR (FEMALE)	1	
P6502	VJS1744T	CONNECTOR (FEMALE)	1	
P7401,02	VJS3537A020G	CONNECTOR (FEMALE) 20P	2	
P7503	VJS3366Z010	CONNECTOR (FEMALE) 10P	1	
P7504	VJS1739T	CONNECTOR (FEMALE)	1	
P9001	VJF0171	CONNECTOR	1	
P9002	VJS1741T	CONNECTOR (FEMALE)	1	
PK7901,02	VJR0477	PACK PIN	2	
PP2001	VJP3042A012W	CONNECTOR (MALE) 12P	1	
PP2002	VJP3042A010W	CONNECTOR (MALE) 10P	1	
PP3001	VJP3042A009W	CONNECTOR (MALE) 9P	1	
PP3002	VJP3042A012W	CONNECTOR (MALE) 12P	1	
PP3003	VJP3042A013W	CONNECTOR (MALE) 13P	1	
PP3011,12	VJP3042A018W	CONNECTOR (MALE) 18P	2	
PP3013	VJP3042A014W	CONNECTOR (MALE) 14P	1	
PP3021-24	VJP3043A012W	CONNECTOR (MALE) 12P	4	
PP3301	VJP3042A011W	CONNECTOR (MALE) 11P	1	
PP4001-03	VJP3186A018	CONNECTOR (MALE) 18P	3	
PP4501	VJP3042A017W	CONNECTOR (MALE) 17P	1	
PP7401-03	VJP3043A005W	CONNECTOR (MALE) 5P	3	
PP7404	VJP3043A006W	CONNECTOR (MALE) 6P	1	
PP7405	VJP3043A004W	CONNECTOR (MALE) 4P	1	
PP7406	VJP3043A010W	CONNECTOR (MALE) 10P	1	
PS301	VJS3042B009W	CONNECTOR (FEMALE) 9P	1	
PS302	VJS3042B012W	CONNECTOR (FEMALE) 12P	1	
PS303	VJS3042B013W	CONNECTOR (FEMALE) 13P	1	
PS701-03	VJS3043B005W	CONNECTOR (FEMALE) 5P	3	
PS704	VJS3043B006W	CONNECTOR (FEMALE) 6P	1	
PS2001	VJS3042B012W	CONNECTOR (FEMALE) 12P	1	
PS2002	VJS3042B010W	CONNECTOR (FEMALE) 10P	1	
PS3021-24	VJS3043B012W	CONNECTOR (FEMALE) 12P	4	
PS3302,03	VJS3042B018W	CONNECTOR (FEMALE) 18P	2	
PS3501	VJS3042F014W	CONNECTOR (FEMALE) 14P	1	
PS3601	VJS3042B011W	CONNECTOR (FEMALE) 11P	1	
PS4001-03	VJS3186B018	CONNECTOR (FEMALE) 18P	3	
PS4701	VJS3042B017W	CONNECTOR (FEMALE) 17P	1	
PS7301,02	VJR0477	PACK PIN	2	
Q301	MSC2295	TRANSISTOR	1	
Q302	MSB709	TRANSISTOR	1	
Q303,04	MSC2295	TRANSISTOR	2	
Q305	MSD601	TRANSISTOR	1	
Q306	MSC2295	TRANSISTOR	1	
Q307,08	MSB709	TRANSISTOR	2	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
Q703	MSD601-S	TRANSISTOR	1	
Q711	MSB709-R	TRANSISTOR	1	
Q712	2SD1996-R	TRANSISTOR	1	
Q714	MSD601-S	TRANSISTOR	1	
Q771	MSD601	TRANSISTOR	1	
Q801	2SA1022	TRANSISTOR	1	
Q802	MSC2295	TRANSISTOR	1	
Q803	MSB709	TRANSISTOR	1	
Q1001	2SD1996	TRANSISTOR	1	
Q2001,02	MSB709	TRANSISTOR	2	
Q3001	MSD602	TRANSISTOR	1	
Q3002	2SB1322	TRANSISTOR	1	
Q3003	MSD601	TRANSISTOR	1	
Q3004	MSC2295	TRANSISTOR	1	
Q3005,06	MSD601	TRANSISTOR	2	
Q3301,02	MSC2295	TRANSISTOR	2	
Q3304,05	MSD601	TRANSISTOR	2	
Q3401,02	MSC2295	TRANSISTOR	2	
Q3403	MSD601	TRANSISTOR	1	
Q3404	MSC2295	TRANSISTOR	1	
Q3405-07	MSD601	TRANSISTOR	3	
Q3408	MSD602	TRANSISTOR	1	
Q3409	MSB710	TRANSISTOR	1	
Q3410-12	MSD601	TRANSISTOR	3	
Q3422	MSD1328	TRANSISTOR	1	
Q3423	MSD601	TRANSISTOR	1	
Q3424	MSB710	TRANSISTOR	1	
Q3425	MSC2295	TRANSISTOR	1	
Q3501	MSD601	TRANSISTOR	1	
Q3502	MSB709	TRANSISTOR	1	
Q3601	MSD601	TRANSISTOR	1	
Q3602,03	MSC2295	TRANSISTOR	2	
Q3604	MSB709	TRANSISTOR	1	
Q3901,02	2SD1991A	TRANSISTOR	2	
Q3903	MSD1328	TRANSISTOR	1	
Q3904	MSD601	TRANSISTOR	1	
Q3905	MSC2295	TRANSISTOR	1	
Q3906	MSB709	TRANSISTOR	1	
Q3907	MSD601	TRANSISTOR	1	
Q3912	2SD1996	TRANSISTOR	1	
Q3913-15	MSD601	TRANSISTOR	3	
Q3916	MSB710	TRANSISTOR	1	
Q3917	MSD602	TRANSISTOR	1	
Q3918	MSB710	TRANSISTOR	1	
Q4501	2SD655	TRANSISTOR	1	
Q4551	2SB561	TRANSISTOR	1	
Q4601,02	MSD1328	TRANSISTOR	2	
Q4701	2SD602A-R	TRANSISTOR	1	
Q4702,03	MSD601	TRANSISTOR	2	
Q4704,05	MSB710	TRANSISTOR	2	
Q4706	2SB1378	TRANSISTOR	1	
Q4707	2SD601A	TRANSISTOR	1	
Q4708	2SB1378	TRANSISTOR	1	
Q6001	2SD1991A	TRANSISTOR	1	
Q6002	MSB709	TRANSISTOR	1	
Q6003	2SD1915F	TRANSISTOR	1	
Q6004-06	MSD601	TRANSISTOR	3	
Q6008	2SD1991	TRANSISTOR	1	
Q7301	MSD601-S	TRANSISTOR	1	
Q7304,05	MSD601	TRANSISTOR	2	
Q7306	2SC2404	TRANSISTOR	1	
Q7307	2SD1328-S	TRANSISTOR	1	
Q7901,02	MSD601	TRANSISTOR	2	
Q7903	2SC3931CD	TRANSISTOR	1	
Q7904-07	2SB1219	TRANSISTOR	4	
Q7908,09	2SC3929	TRANSISTOR	2	
Q7910,11	2SD1820	TRANSISTOR	2	
Q7912	2SB1219	TRANSISTOR	1	
Q7913	2SB1218-Q	TRANSISTOR	1	
Q7914,15	2SD1979-S	TRANSISTOR	2	
Q7916,17	2SB1219	TRANSISTOR	2	
QR301	MRN1402	TRANSISTOR-RESISTOR	1	
QR302	MRN1403	TRANSISTOR-RESISTOR	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
QR303	MRN1404	TRANSISTOR RESISTOR	1	
QR304	MRN1402	TRANSISTOR RESISTOR	1	
QR305	MRN2404	TRANSISTOR-RESISTOR	1	
QR306	XN6213	TRANSISTOR RESISTOR	1	
QR307	MRN1404	TRANSISTOR RESISTOR	1	
QR308	MRN1407	TRANSISTOR RESISTOR	1	
QR309	MRN1402	TRANSISTOR RESISTOR	1	
QR310	MRN1404	TRANSISTOR RESISTOR	1	
QR311	MRN2404	TRANSISTOR RESISTOR	1	
QR312	MRN2402	TRANSISTOR RESISTOR	1	
QR313,14	MRN1404	TRANSISTOR RESISTOR	2	
QR315	MRN2404	TRANSISTOR RESISTOR	1	
QR316,17	XN6213	TRANSISTOR RESISTOR	2	
QR318	MRN1402	TRANSISTOR RESISTOR	1	
QR319,20	MRN1404	TRANSISTOR RESISTOR	2	
QR701	MRN1407	TRANSISTOR-RESISTOR	1	
QR702	MRN1404	TRANSISTOR-RESISTOR	1	
QR703	MRN2403	TRANSISTOR-RESISTOR	1	
QR704	MRN1404	TRANSISTOR RESISTOR	1	
QR802	MRN1404	TRANSISTOR RESISTOR	1	
QR803	MRN1403	TRANSISTOR RESISTOR	1	
QR805	MRN1404	TRANSISTOR RESISTOR	1	
QR806	XN6213	TRANSISTOR RESISTOR	1	
QR1001,02	MRN1402	TRANSISTOR RESISTOR	2	
QR2001	XN1213	TRANSISTOR-TRANSISTOR	1	
QR2002	MRN2404	TRANSISTOR RESISTOR	1	
QR2501	XN1211	TRANSISTOR RESISTOR	1	
QR3001,02	MRN1403	TRANSISTOR-RESISTOR	2	
QR3003	MRN2402	TRANSISTOR-RESISTOR	1	
QR3301-04	DTC363EK	TRANSISTOR RESISTOR	4	
QR3305	UN211D	TRANSISTOR-RESISTOR	1	
QR3306	DTC363EK	TRANSISTOR RESISTOR	1	
QR3307	MRN1404	TRANSISTOR-RESISTOR	1	
QR3402	MRN2402	TRANSISTOR RESISTOR	1	
QR3403	MRN1403	TRANSISTOR RESISTOR	1	
QR3404	XN4212	TRANSISTOR TRANSISTOR	1	
QR3405	MRN1403	TRANSISTOR RESISTOR	1	
QR3406 08	XN1212	TRANSISTOR-RESISTOR	3	
QR3409,10	MRN1403	TRANSISTOR-RESISTOR	2	
QR3411	MRN1402	TRANSISTOR-RESISTOR	1	
QR3412	MRN1404	TRANSISTOR RESISTOR	1	
QR3415	XN4212	TRANSISTOR-TRANSISTOR	1	
QR3416	XN1212	TRANSISTOR RESISTOR	1	
QR3417	XN4212	TRANSISTOR TRANSISTOR	1	
QR3901 03	MRN1404	TRANSISTOR RESISTOR	3	
QR3904,05	MRN1402	TRANSISTOR-RESISTOR	2	
QR3906	MRN1404	TRANSISTOR-RESISTOR	1	
QR4001	MRN1403	TRANSISTOR-RESISTOR	1	
QR4002,03	DTC363EK	TRANSISTOR RESISTOR	2	
QR4004,05	MRN1404	TRANSISTOR RESISTOR	2	
QR4508,09	MRN2404	TRANSISTOR RESISTOR	2	
QR4510	MRN1403	TRANSISTOR RESISTOR	1	
QR4602	MRN2402	TRANSISTOR RESISTOR	1	
QR4603	MRN1404	TRANSISTOR-RESISTOR	1	
QR4701-03	MRN1403	TRANSISTOR-RESISTOR	3	
QR4704	MRN1404	TRANSISTOR RESISTOR	1	
QR4901	MRN1404	TRANSISTOR-RESISTOR	1	
QR4902	UN211D	TRANSISTOR RESISTOR	1	
QR6001	MRN1402	TRANSISTOR-RESISTOR	1	
QR6002,03	MRN2402	TRANSISTOR RESISTOR	2	
QR6004	MRN1402	TRANSISTOR RESISTOR	1	
QR6009	XN1213	TRANSISTOR-TRANSISTOR	1	
QR6012	MRN1404	TRANSISTOR-RESISTOR	1	
QR6013	MRN1403	TRANSISTOR RESISTOR	1	
QR6014	MRN1404	TRANSISTOR-RESISTOR	1	
QR6015	MRN2402	TRANSISTOR-RESISTOR	1	
QR7301,02	MRN1404	TRANSISTOR-RESISTOR	2	
QR7312-14	MRN1402	TRANSISTOR RESISTOR	3	
QR7315,16	MRN1404	TRANSISTOR RESISTOR	2	
QR7901,02	UN5213	TRANSISTOR RESISTOR	2	
QR7903	UN5112	TRANSISTOR-RESISTOR	1	
QR7904	UN5214	TRANSISTOR-RESISTOR	1	
QR7905,06	UN5213	TRANSISTOR RESISTOR	2	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
R301	ERJ6GMYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R303	ERJ6GMYJ562	M.RESISTOR CH 1/10W 5.6K	1	
R304	ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R305	ERJ6GMYJ152	M.RESISTOR CH 1/10W 1.5K	1	
R306	ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
R307	ERJ6GMYJ562	M.RESISTOR CH 1/10W 5.6K	1	
R308	ERJ6GMYJ104	M.RESISTOR CH 1/10W 1M	1	
R309	ERJ6GMYJ471	M.RESISTOR CH 1/10W 470	1	
R310	ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R311	ERJ6GMYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R312	ERJ6GMYJ152	M.RESISTOR CH 1/10W 1.5K	1	
R313	ERJ6GMYJ361	M.RESISTOR CH 1/10W 360	1	
R314	ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R315	ERJ6GMYJ152	M.RESISTOR CH 1/10W 1.5K	1	
R316	ERJ6GMYJ472	M.RESISTOR CH 1/10W 4.7K	1	
R317	ERJ6GMYJ561	M.RESISTOR CH 1/10W 560	1	
R318	ERJ6GMYJ221	M.RESISTOR CH 1/10W 220	1	
R319	ERJ6GMYJ561	M.RESISTOR CH 1/10W 560	1	
R320	ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R321	ERJ6GMYJ122	M.RESISTOR CH 1/10W 1.2K	1	
R322	ERJ6GMYJ563	M.RESISTOR CH 1/10W 56K	1	
R323	ERJ6GMYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R324	ERJ6GMYJ152	M.RESISTOR CH 1/10W 1.5K	1	
R325	ERJ6GMYJ101	M.RESISTOR CH 1/10W 100	1	
R326	ERJ6GMYJ562	M.RESISTOR CH 1/10W 5.6K	1	
R327	ERJ6GMYJ223	M.RESISTOR CH 1/10W 22K	1	
R328	ERJ6GMYJ122	M.RESISTOR CH 1/10W 1.2K	1	
R329	ERJ6GMYJ152	M.RESISTOR CH 1/10W 1.5K	1	
R330	ERJ6GMYG432	M.RESISTOR CH 1/10W 4.3K	1	
R331	ERJ6GMYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R332	ERJ6GMYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R333	ERJ6GMYJ152	M.RESISTOR CH 1/10W 1.5K	1	
R334	ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R335	ERJ6GMYJ101	M.RESISTOR CH 1/10W 100	1	
R336	ERJ6GMYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R337	ERJ6GMYJ391	M.RESISTOR CH 1/10W 390	1	
R338,39	ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	2	
R340	ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R341	ERJ6GMYJ471	M.RESISTOR CH 1/10W 470	1	
R342	ERJ6GMYJ181	M.RESISTOR CH 1/10W 180	1	
R343	ERJ6GMYJ273	M.RESISTOR CH 1/10W 27K	1	
R344	ERJ6GMYJ911	M.RESISTOR CH 1/10W 910	1	
R345	ERJ6GMYJ822	M.RESISTOR CH 1/10W 8.2K	1	
R346	ERJ6GMYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R347	ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R348	ERJ6GMYJ273	M.RESISTOR CH 1/10W 27K	1	
R349	ERJ6GMYJ333	M.RESISTOR CH 1/10W 33K	1	
R350	ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R351	ERJ6GMYJ822	M.RESISTOR CH 1/10W 8.2K	1	
R352	ERJ6GMYG183	M.RESISTOR CH 1/10W 18K	1	
R353	ERJ6GMYJ822	M.RESISTOR CH 1/10W 8.2K	1	
R354	ERJ6GMYG753	M.RESISTOR CH 1/10W 75K	1	
R355	ERJ6GMYJ471	M.RESISTOR CH 1/10W 470	1	
R356	ERJ6GMYJ152	M.RESISTOR CH 1/10W 1.5K	1	
R357	ERJ6GMYJ472	M.RESISTOR CH 1/10W 4.7K	1	
R358	ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R359	ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
R360,61	ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	2	
R716	ERJ6GEYJ152	M.RESISTOR CH 1/10W 1.5K	1	
R719	ERJ6GEYJ105	M.RESISTOR CH 1/10W 1M	1	
R720	ERJ6GEYJ682	M.RESISTOR CH 1/10W 6.8K	1	
R721	ERJ6GEYJ471	M.RESISTOR CH 1/10W 470	1	
R724	ERJ6GEYJ822	M.RESISTOR CH 1/10W 8.2K	1	
R725	ERJ6GEYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R727	ERJ6GEYJ101	M.RESISTOR CH 1/10W 100	1	
R728	ERDS2TJ102	C.RESISTOR 1/4W 1K	1	
R730	ERJ6GEYJ152	M.RESISTOR CH 1/10W 1.5K	1	
R731	ERJ6GEYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R732	ERJ6GEYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R736	ERJ6GEYJ471	M.RESISTOR CH 1/10W 470	1	
R737	ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R740	ERJ6GEYJ394	M.RESISTOR CH 1/10W 390K	1	
R742	ERJ6GEYJ473	M.RESISTOR CH 1/10W 47K	1	
R743	ERJ6GEYJ474	M.RESISTOR CH 1/10W 470K	1	
R744	ERJ6GEYJ562	M.RESISTOR CH 1/10W 5.6K	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
R745	ERJ6GEYJ331	M.RESISTOR CH 1/10W 330	1	
R746	ERDS2TJ151	C.RESISTOR 1/4W 150	1	
R750	ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R758	ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R763	ERJ6GEYJ221	M.RESISTOR CH 1/10W 220	1	
R772	ERJ6GEYJ271	M.RESISTOR CH 1/10W 270	1	
R773	ERJ6GEYJ472	M.RESISTOR CH 1/10W 4.7K	1	
R774	ERJ6GEYJ562	M.RESISTOR CH 1/10W 5.6K	1	
R779	ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R781	ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	
R790	ERJ6GEYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R793	ERJ6GEYJ101	M.RESISTOR CH 1/10W 100	1	
R794	ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R796	ERJ6GEYJ271	M.RESISTOR CH 1/10W 270	1	
R797	ERJ6GEYJ391	M.RESISTOR CH 1/10W 390	1	
R798	ERJ6GEYJ104	M.RESISTOR CH 1/10W 100K	1	
R799	ERJ6GEYJ272	M.RESISTOR CH 1/10W 2.7K	1	
R802	ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R803	ERJ6GMYG242	M.RESISTOR CH 1/10W 2.4K	1	
R804,05	ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	2	
R809	ERJ6GMYJ822	M.RESISTOR CH 1/10W 8.2K	1	
R810,11	ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	2	
R814	ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R815	ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R816	ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
R817	ERJ6GMYJ152	M.RESISTOR CH 1/10W 1.5K	1	
R818	ERJ6GMYJ333	M.RESISTOR CH 1/10W 33K	1	
R820	ERJ6GMYJ471	M.RESISTOR CH 1/10W 470	1	
R821,22	ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	2	
R824	ERJ6GMYJ471	M.RESISTOR CH 1/10W 470	1	
R825	ERJ6GMYJ271	M.RESISTOR CH 1/10W 270	1	
R826	ERJ6GMYJ221	M.RESISTOR CH 1/10W 220	1	
R827	ERJ6GMYJ154	M.RESISTOR CH 1/10W 150K	1	
R828	ERJ6GMYJ204	M.RESISTOR CH 1/10W 200K	1	
R829	ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R830	ERJ6GMYJ154	M.RESISTOR CH 1/10W 150K	1	
R831	ERJ6GMYJ153	M.RESISTOR CH 1/10W 15K	1	
R832	ERJ6GMYJ122	M.RESISTOR CH 1/10W 1.2K	1	
R833	ERJ6GMYJ471	M.RESISTOR CH 1/10W 470	1	
R834	ERJ6GMYJ122	M.RESISTOR CH 1/10W 1.2K	1	
R835,36	ERJ6GMYJ152	M.RESISTOR CH 1/10W 1.5K	2	
R837	ERJ6GMYJ122	M.RESISTOR CH 1/10W 1.2K	1	
R838,39	ERJ6GMYJ681	M.RESISTOR CH 1/10W 680	2	
R840	ERJ6GMYJ272	M.RESISTOR CH 1/10W 2.7K	1	
R841	ERJ6GMYJ182	M.RESISTOR CH 1/10W 1.8K	1	
R842,43	ERJ6GMYJ271	M.RESISTOR CH 1/10W 270	2	
R844	ERJ6GMYJ122	M.RESISTOR CH 1/10W 1.2K	1	
R845	ERJ6GMYJ182	M.RESISTOR CH 1/10W 1.8K	1	
R846	ERJ6GMYJ272	M.RESISTOR CH 1/10W 2.7K	1	
R847	ERJ6GMYJ223	M.RESISTOR CH 1/10W 22K	1	
R848	ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R849	ERJ6GMYK395	M.RESISTOR CH 1/10W 3.9M	1	
R850	ERJ6GMYJ302	M.RESISTOR CH 1/10W 3K	1	
R851	ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R1001	ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R1002	ERDS1TJ822	C.RESISTOR 1/2W 8.2K	1	
R2004	ERJ6GMYJ104	M.RESISTOR CH 1/10W 1M	1	
R2005	ERJ6GMYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R2011	ERJ6GMYG222	M.RESISTOR CH 1/10W 2.2K	1	
R2012	ERJ6GMYG392	M.RESISTOR CH 1/10W 3.9K	1	
R2013,14	ERJ6GMYJ223	M.RESISTOR CH 1/10W 22K	2	
R2015	ERJ6GMYJ472	M.RESISTOR CH 1/10W 4.7K	1	
R2016	ERJ6GMYJ682	M.RESISTOR CH 1/10W 6.8K	1	
R2018	ERJ6GMYJ104	M.RESISTOR CH 1/10W 1M	1	
R2019	ERJ6GEYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R2501	ERX1SJ1R8	M.RESISTOR 1W 1.8	1	
R2502	ERJ6GMYG112	M.REISITOR CH 1/10W 1.1K	1	
R2503	ERJ6GMYG102	M.RESISTOR CH 1/10W 1K	1	
R2504	ERJ6GMYG332	M.RESISTOR CH 1/10W 3.3K	1	
R2505	VRE0034E103	M.RESISTOR CH 1/10W 10K	1	
R2506	ERJ6GMYJ564	M.RESISTOR CH 1/10W 560K	1	
R2507	VRE0034E103	M.RESISTOR CH 1/10W 10K	1	
R2508	VRE0034E512	M.RESISTOR CH 1/10W 5.1K	1	
R2509	VRE0034E472	M.RESISTOR CH 1/10W 4.7K	1	
R2510	ERJ6GMYJ105	M.RESISTOR CH 1/10W 1M	1	
R2511	ERJ6GMYJ684	M.RESISTOR CH 1/10W 680K	1	
R2513	ERJ6GMYG133	M.RESISTOR CH 1/10W 13K	1	
R2514	ERJ6GMYG821	M.RESISTOR CH 1/10W 820	1	
R2515	ERG12SJ561	M.RESISTOR 1/2W 560	1	
R2516	ERJ6GMYG473	M.RESISTOR CH 1/10W 47K	1	
R2517	ERX12SJR47	M.RESISTOR CH 1/2W 0.47	1	
R2518	ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R2519	ERJ6GMYG432	M.RESISTOR CH 1/10W 4.3K	1	
R2520	ERJ6GMYG103	M.RESISTOR CH 1/10W 10K	1	
R2521-23	ERDS2TJ560	C.RESISTOR 1/4W 56	3	
R2524	ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R2525	EROS2CKG6800	M.RESISTOR 1/4W 680	1	
R2526	ERJ6GMYJ392	M.RESISTOR CH 1/10W 3.9K	1	
R2527	ERJ6GMYJ105	M.RESISTOR CH 1/10W 1M	1	
R2528	ERJ6GMYJ562	M.RESISTOR CH 1/10W 5.6K	1	
R2529	ERJ6GMYJ392	M.RESISTOR CH 1/10W 3.9K	1	
R2530	ERJ6GMYJ105	M.RESISTOR CH 1/10W 1M	1	
R2531,32	ERJ6GMYJ472	M.RESISTOR CH 1/10W 4.7K	2	
R2533	ERJ6GMYJ393	M.RESISTOR CH 1/10W 39K	1	
R2534	ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R2535	ERJ6GMYJ272	M.RESISTOR CH 1/10W 2.7K	1	
R2536	ERJ6GMYJ824	M.RESISTOR CH 1/10W 820K	1	
R2537	ERJ6GMYJ393	M.RESISTOR CH 1/10W 39K	1	
R2538	ERJ6GMYJ182	M.RESISTOR CH 1/10W 1.8K	1	
R2539	ERJ6GMYJ681	M.RESISTOR CH 1/10W 680	1	
R2540	ERJ6GMYJ105	M.RESISTOR CH 1/10W 1M	1	
R2541	ERJ6GMYJ271	M.RESISTOR CH 1/10W 270	1	
R3001,02	ERJ6GMYJ750	M.RESISTOR CH 1/10W 75	2	
R3003	ERJ6GMYJ333	M.RESISTOR CH 1/10W 33K	1	
R3004	ERJ6GMYJ683	M.RESISTOR CH 1/10W 68K	1	
R3005	ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R3006,07	ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	2	
R3008	ERJ6GMYJ152	M.RESISTOR CH 1/10W 1.5K	1	
R3009	ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R3010	ERJ6GMYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R3011	ERJ6GMYJ272	M.RESISTOR CH 1/10W 2.7K	1	
R3012	ERJ6GMYG911	M.RESISTOR CH 1/10W 910	1	
R3013	ERJ6GMYG102	M.RESISTOR CH 1/10W 1K	1	
R3014	ERJ6GMYG471	M.RESISTOR CH 1/10W 470	1	
R3015	ERJ6GMYG102	M.RESISTOR CH 1/10W 1K	1	
R3016	ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R3017	ERJ6GMYJ152	M.RESISTOR CH 1/10W 1.5K	1	
R3018	ERJ6GMYJ392	M.RESISTOR CH 1/10W 3.9K	1	
R3019	ERJ6GMYJ472	M.RESISTOR CH 1/10W 4.7K	1	
R3021	ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R3022	ERJ6GMYJ101	M.RESISTOR CH 1/10W 100	1	
R3023	ERJ6GEYJ221	M.RESISTOR CH 1/10W 220	1	
R3024	ERJ6GMYJ221	M.RESISTOR CH 1/10W 220	1	
R3025	ERJ6GEYJ221	M.RESISTOR CH 1/10W 220	1	
R3026,27	ERJ6GMYJ221	M.RESISTOR CH 1/10W 220	2	
R3301	ERJ6GMYJ473	M.RESISTOR CH 1/10W 47K	1	
R3302	ERJ6GMYJ183	M.RESISTOR CH 1/10W 18K	1	
R3303	ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R3304	ERJ6GMYJ472	M.RESISTOR CH 1/10W 4.7K	1	
R3305	ERJ6GMYJ562	M.RESISTOR CH 1/10W 5.6K	1	
R3306	ERJ6GMYJ472	M.RESISTOR CH 1/10W 4.7K	1	
R3307	ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R3308	ERJ6GMYJ272	M.RESISTOR CH 1/10W 2.7K	1	
R3310	ERJ6GMYJ272	M.RESISTOR CH 1/10W 2.7K	1	
R3322	ERJ6GMYJ471	M.RESISTOR CH 1/10W 470	1	
R3323	ERJ6GMYJ561	M.RESISTOR CH 1/10W 560	1	
R3324	ERJ6GMYJ152	M.RESISTOR CH 1/10W 1.5K	1	
R3325,26	ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	2	
R3327	ERJ6GMYJ821	M.RESISTOR CH 1/10W 820	1	
R3328	ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R3333	ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R3334	ERJ6GMYJ682	M.RESISTOR CH 1/10W 6.8K	1	
R3335	ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R3336,37	ERJ6GMYJ681	M.RESISTOR CH 1/10W 680	2	
R3338	ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R3339	ERJ6GMYJ473	M.RESISTOR CH 1/10W 47K	1	
R3340	ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R3341	ERJ6GMYJ563	M.RESISTOR CH 1/10W 56K	1	
R3342	ERJ6GMYJ391	M.RESISTOR CH 1/10W 390	1	
R3345-47	ERJ6GMYJ821	M.RESISTOR CH 1/10W 820	3	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
R3352	ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R3353	ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
R3401	ERJ6GMYJ272	M.RESISTOR CH 1/10W 2.7K	1	
R3402	ERJ6GMYJ183	M.RESISTOR CH 1/10W 18K	1	
R3403	ERJ6GMYG361	M.RESISTOR CH 1/10W 360	1	
R3404	ERJ6GMYJ473	M.RESISTOR CH 1/10W 47K	1	
R3405	ERJ6GMYG123	M.RESISTOR CH 1/10W 12K	1	
R3406	ERJ6GMYG512	M.RESISTOR CH 1/10W 5.1K	1	
R3407	ERJ6GMYG272	M.RESISTOR CH 1/10W 2.7K	1	
R3408	ERJ6GMYG302	M.RESISTOR CH 1/10W 3K	1	
R3409	ERJ6GMYG821	M.RESISTOR CH 1/10W 820	1	
R3410	ERJ6GMYJ473	M.RESISTOR CH 1/10W 47K	1	
R3411-13	ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	3	
R3415	ERJ6GMYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R3417	ERJ6GMYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R3422	ERJ6GMYG333	M.RESISTOR CH 1/10W 33K	1	
R3423	ERJ6GMYG683	M.RESISTOR CH 1/10W 68K	1	
R3424	ERJ6GMYJ272	M.RESISTOR CH 1/10W 2.7K	1	
R3425	ERJ6GMYJ183	M.RESISTOR CH 1/10W 18K	1	
R3426	ERJ6GMYJ391	M.RESISTOR CH 1/10W 390	1	
R3427	ERJ6GMYJ473	M.RESISTOR CH 1/10W 47K	1	
R3428	ERJ6GMYJ471	M.RESISTOR CH 1/10W 470	1	
R3429	ERJ6GMYJ473	M.RESISTOR CH 1/10W 47K	1	
R3430	ERJ6GMYJ823	M.RESISTOR CH 1/10W 82K	1	
R3431	ERJ6GMYG821	M.RESISTOR CH 1/10W 820	1	
R3433	ERJ6GMYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R3434	ERJ6GMYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R3435	ERJ6GMYG302	M.RESISTOR CH 1/10W 3K	1	
R3436	ERJ6GMYG272	M.RESISTOR CH 1/10W 2.7K	1	
R3437	ERJ6GMYG512	M.RESISTOR CH 1/10W 5.1K	1	
R3438	ERJ6GMYG123	M.RESISTOR CH 1/10W 12K	1	
R3441	ERJ6GMYJ333	M.RESISTOR CH 1/10W 33K	1	
R3442	ERJ6GMYJ473	M.RESISTOR CH 1/10W 47K	1	
R3443	ERJ6GMYJ333	M.RESISTOR CH 1/10W 33K	1	
R3444,45	ERJ6GMYJ473	M.RESISTOR CH 1/10W 47K	2	
R3446,47	ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	2	
R3463	ERJ6GMYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R3464	ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R3465	ERJ6GMYJ122	M.RESISTOR CH 1/10W 1.2K	1	
R3466	ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R3467	ERJ6GMYJ182	M.RESISTOR CH 1/10W 1.8K	1	
R3468,69	ERJ6GMYJ822	M.RESISTOR CH 1/10W 8.2K	2	
R3470	ERJ6GMYG123	M.RESISTOR CH 1/10W 12K	1	
R3471	ERJ6GMYG512	M.RESISTOR CH 1/10W 5.1K	1	
R3472	ERJ6GMYG272	M.RESISTOR CH 1/10W 2.7K	1	
R3473	ERJ6GMYG302	M.RESISTOR CH 1/10W 3K	1	
R3474	ERJ6GMYG821	M.RESISTOR CH 1/10W 820	1	
R3475	ERJ6GMYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R3501	ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R3502	ERJ6GMYJ682	M.RESISTOR CH 1/10W 6.8K	1	
R3503	ERJ6GMYJ152	M.RESISTOR CH 1/10W 1.5K	1	
R3504,05	ERJ6GMYJ221	M.RESISTOR CH 1/10W 220	2	
R3506	ERJ6GMYJ104	M.RESISTOR CH 1/10W 1M	1	
R3507	ERJ6GMYG103	M.RESISTOR CH 1/10W 10K	1	
R3508	ERJ6GMYG332	M.RESISTOR CH 1/10W 3.3K	1	
R3509-11	ERJ6GMYJ333	M.RESISTOR CH 1/10W 33K	3	
R3513,14	ERJ6GMYJ332	M.RESISTOR CH 1/10W 3.3K	2	
R3515	ERJ6GMYJ562	M.RESISTOR CH 1/10W 5.6K	1	
R3516	ERJ6GMYJ152	M.RESISTOR CH 1/10W 1.5K	1	
R3517	ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R3518	ERJ6GMYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R3519	ERJ6GMYJ272	M.RESISTOR CH 1/10W 2.7K	1	
R3520	ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R3521	ERJ6GMYJ122	M.RESISTOR CH 1/10W 1.2K	1	
R3522	ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R3523	ERJ6GMYJ122	M.RESISTOR CH 1/10W 1.2K	1	
R3524	ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R3525	ERJ6GMYJ331	M.RESISTOR CH 1/10W 330	1	
R3526	ERJ6GMYJ470	M.RESISTOR CH 1/10W 47	1	
R3601	ERJ6GMYJ152	M.RESISTOR CH 1/10W 1.5K	1	
R3602	ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R3603	ERJ6GMYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R3604	ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R3605	ERJ6GMYJ223	M.RESISTOR CH 1/10W 22K	1	
R3606	ERJ6GMYJ821	M.RESISTOR CH 1/10W 820	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
R3607-12	ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	6	
R3613	ERJ6GMYJ561	M.RESISTOR CH 1/10W 560	1	
R3614	ERJ6GMYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R3615	ERJ6GMYJ681	M.RESISTOR CH 1/10W 680	1	
R3616	ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R3901-05	ERJ6GMYJ750	M.RESISTOR CH 1/10W 75	5	
R3906	ERDS1TJ750	C.RESISTOR 1/2W 75	1	
R3908,09	ERJ6GMYJ750	M.RESISTOR CH 1/10W 75	2	
R3910,11	ERJ6GMYJ471	M.RESISTOR CH 1/10W 470	2	
R3912,13	ERJ6GMYJ151	M.RESISTOR CH 1/10W 150	2	
R3914	ERJ6GMYJ750	M.RESISTOR CH 1/10W 75	1	
R3915	ERJ6GMYJ472	M.RESISTOR CH 1/10W 4.7K	1	
R3916,17	ERDS2TJ181	C.RESISTOR 1/4W 180	2	
R3926	ERJ6GMYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R3927,28	ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	2	
R3929	ERJ6GMYJ152	M.RESISTOR CH 1/10W 1.5K	1	
R3930	ERJ6GMYJ112	M.RESISTOR CH 1/10W 1.1K	1	
R3931	ERJ6GMYJ123	M.RESISTOR CH 1/10W 12K	1	
R3932	ERJ6GMYJ183	M.RESISTOR CH 1/10W 18K	1	
R3933	ERJ6GMYJ104	M.RESISTOR CH 1/10W 1M	1	
R3934	ERJ6GMYJ223	M.RESISTOR CH 1/10W 22K	1	
R3935	ERJ6GMYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R3936	ERJ6GMYJ561	M.RESISTOR CH 1/10W 560	1	
R3938	ERJ6GMYJ473	M.RESISTOR CH 1/10W 47K	1	
R3945	ERJ6GMYJ561	M.RESISTOR CH 1/10W 560	1	
R3946	ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
R3950,51	ERJ6GMYJ331	M.RESISTOR CH 1/10W 330	2	
R3953	ERDS2TJ562	C.RESISTOR 1/4W 5.6K	1	
R3954	ERJ6GMYJ682	M.RESISTOR CH 1/10W 6.8K	1	
R3955	ERJ6GMYJ123	M.RESISTOR CH 1/10W 12K	1	
R3956	ERJ6GMYJ822	M.RESISTOR CH 1/10W 8.2K	1	
R3957-60	ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	4	
R3961	ERJ6GMYJ750	M.RESISTOR CH 1/10W 75	1	
R3962	ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R3963	ERJ6GMYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R3964	ERJ6GMYJ223	M.RESISTOR CH 1/10W 22K	1	
R3965	ERJ6GMYJ562	M.RESISTOR CH 1/10W 5.6K	1	
R3966	ERJ6GMYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R3967	ERJ6GMYJ272	M.RESISTOR CH 1/10W 2.7K	1	
R3968	ERJ6GMYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R4001,02	ERDS2TJ680	C.RESISTOR 1/4W 68	2	
R4003-08	ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	6	
R4009	ERJ6GMYJ472	M.RESISTOR CH 1/10W 4.7K	1	
R4010	ERJ6GMYG433	M.RESISTOR CH 1/10W 43K	1	
R4011	ERJ6GMYJ152	M.RESISTOR CH 1/10W 1.5K	1	
R4012	ERJ6GMYJ272	M.RESISTOR CH 1/10W 2.7K	1	
R4013	ERJ6GMYJ682	M.RESISTOR CH 1/10W 6.8K	1	
R4014	ERJ6GMYG100	M.RESISTOR CH 1/10W 10	1	
R4015	ERJ6GMYJ822	M.RESISTOR CH 1/10W 8.2K	1	
R4020	ERJ6GMYJ562	M.RESISTOR CH 1/10W 5.6K	1	
R4021	ERJ6GMYJ333	M.RESISTOR CH 1/10W 33K	1	
R4022	ERJ6GMYJ273	M.RESISTOR CH 1/10W 27K	1	
R4028	ERJ6GMYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R4029,30	ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	2	
R4033	ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
R4034	ERJ6GMYG393	M.RESISTOR CH 1/10W 39K	1	
R4035	ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
R4036	ERJ6GMYG393	M.RESISTOR CH 1/10W 39K	1	
R4501,02	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	2	
R4503	VRE0071E36C	M.RESISTOR CH 1/10W	1	
R4504,05	ERJ6GEYJ393	M.RESISTOR CH 1/10W 39K	2	
R4506,07	ERJ6GEYJ473	M.RESISTOR CH 1/10W 47K	2	
R4508	ERJ6GEYG224	M.RESISTOR CH 1/10W 220K	1	
R4509	ERJ6GEYJ822	M.RESISTOR CH 1/10W 8.2K	1	
R4510	ERJ6GEYJ621	M.RESISTOR CH 1/10W 620	1	
R4511	ERJ6GEYG273	M.RESISTOR CH 1/10W 27K	1	
R4512	VRE0034E163	M.RESISTOR CH 1/10W 16K	1	
R4513	ERJ3GEYG103	M.RESISTOR CH 1/16W 10K	1	
R4514,15	ERJ6GEYJ223	M.RESISTOR CH 1/10W 22K	2	
R4518,19	ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	2	
R4522	ERJ6GEYJ225	M.RESISTOR CH 1/10W 2.2M	1	
R4527	VRE0034E333	M.RESISTOR CH 1/10W 33K	1	
R4528	VRE0034E153	M.RESISTOR CH 1/10W 15K	1	
R4529	ERJ6GEYG562	M.RESISTOR CH 1/10W 5.6K	1	
R4530	ERJ3GEYJ334	M.RESISTOR CH 1/16W 330K	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
R4534	ERJ6GEYJ472	M.RESISTOR CH 1/10W 4.7K	1	
R4535	ERJ3GEYJ104	M.RESISTOR CH 1/16W 100K	1	
R4539	ERJ6GEYJ104	M.RESISTOR CH 1/10W 100K	1	
R4541	ERJ6GEYJ152	M.RESISTOR CH 1/10W 1.5K	1	
R4542	ERJ6GEYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R4543	ERJ3GEYJ472	M.RESISTOR CH 1/16W 4.7K	1	
R4551,52	ERJ3GEYJ393	M.RESISTOR CH 1/16W 39K	2	
R4553	ERJ6GEYJ273	M.RESISTOR CH 1/10W 27K	1	
R4554	ERJ3GEYJ273	M.RESISTOR CH 1/16W 27K	1	
R4558	ERJ6GEYG224	M.RESISTOR CH 1/10W 220K	1	
R4561	ERJ6GEYG273	M.RESISTOR CH 1/10W 27K	1	
R4562	VRE0034E10C	M.RESISTOR CH 1/10W	1	
R4563	ERJ3GEYG272	M.RESISTOR CH 1/16W 2.7K	1	
R4568	ERJ6GEYJ273	M.RESISTOR CH 1/10W 27K	1	
R4569	ERJ3GEYJ273	M.RESISTOR CH 1/16W 27K	1	
R4573	ERJ6GEYJ152	M.RESISTOR CH 1/10W 1.5K	1	
R4577	ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	1	
R4578	VRE0034E473	M.RESISTOR CH 1/10W 47K	1	
R4581	ERJ6GEYJ104	M.RESISTOR CH 1/10W 100K	1	
R4583	ERJ3GEYJ102	M.RESISTOR CH 1/16W 1K	1	
R4584	ERJ6GEYJ152	M.RESISTOR CH 1/10W 1.5K	1	
R4585	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R4586	ERJ6GEYJ152	M.RESISTOR CH 1/10W 1.5K	1	
R4587,88	ERJ3GEYJ273	M.RESISTOR CH 1/16W 27K	2	
R4591	ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	1	
R4592	ERJ6GEYJ563	M.RESISTOR CH 1/10W 56K	1	
R4593	ERJ6GEYJ472	M.RESISTOR CH 1/10W 4.7K	1	
R4594	ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	1	
R4603	ERJ3GEYG183	M.RESISTOR CH 1/16W 18K	1	
R4606	ERJ6GEYJ562	M.RESISTOR CH 1/10W 5.6K	1	
R4610	ERJ6GEYJ473	M.RESISTOR CH 1/10W 47K	1	
R4611	ERJ6GMYJ101	M.RESISTOR CH 1/10W 100	1	
R4612	ERJ6GEYJ331	M.RESISTOR CH 1/10W 330	1	
R4613	ERJ6GEYJ394	M.RESISTOR CH 1/10W 390K	1	
R4615	ERJ6GEYJ133	M.RESISOTR CH 1/10W 13K	1	
R4616	ERJ6GEYJ105	M.RESISTOR CH 1/10W 1M	1	
R4638	ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
R4649	ERJ3GEYG470	M.RESISTOR CH 1/16W 47	1	
R4651	ERJ6GEYJ101	M.RESISTOR CH 1/10W 100	1	
R4652	ERJ6GEYJ223	M.RESISTOR CH 1/10W 22K	1	
R4653	ERJ6GEYJ221	M.RESISTOR CH 1/10W 220	1	
R4654	ERJ6GEYJ223	M.RESISTOR CH 1/10W 22K	1	
R4655	ERJ6GEYJ562	M.RESISTOR CH 1/10W 5.6K	1	
R4656	ERJ6GEYG243	M.RESISTOR CH 1/10W 24K	1	
R4657	ERJ6GEYJ392	M.RESISTOR CH 1/10W 3.9K	1	
R4666	ERJ6GEYJ471	M.RESISTOR CH 1/10W 470	1	
R4701	ERJ6GMYJ153	M.RESISTOR CH 1/10W 15K	1	
R4702	ERJ6GMYJ821	M.RESISTOR CH 1/10W 820	1	
R4703	ERJ6GMYJ471	M.RESISTOR CH 1/10W 470	1	
R4704,05	ERJ6GMYJ153	M.RESISTOR CH 1/10W 15K	2	
R4706	ERJ6GMYJ562	M.RESISTOR CH 1/10W 5.6K	1	
R4707	ERJ6GMYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R4708	ERJ6GMYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R4709	ERJ6GMYJ152	M.RESISTOR CH 1/10W 1.5K	1	
R4710	ERJ6GMYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R4711	ERJ6GMYJ223	M.RESISTOR CH 1/10W 22K	1	
R4712	ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R4713	ERJ6GMYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R4714	ERJ6GMYJ562	M.RESISTOR CH 1/10W 5.6K	1	
R4715	ERJ6GMYJ333	M.RESISTOR CH 1/10W 33K	1	
R4716	ERJ6GMYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R4717	ERJ6GMYJ152	M.RESISTOR CH 1/10W 1.5K	1	
R4718	ERJ6GMYG753	M.RESISTOR CH 1/10W 75K	1	
R4719	ERJ6GMYG203	M.RESISTOR CH 1/10W 20K	1	
R4720,21	ERJ6GMYJ822	M.RESISTOR CH 1/10W 8.2K	2	
R4722	ERJ6GMYJ104	M.RESISTOR CH 1/10W 1M	1	
R4723	ERJ6GMYJ183	M.RESISTOR CH 1/10W 18K	1	
R4724,25	ERJ6GMYJ473	M.RESISTOR CH 1/10W 47K	2	
R4726	ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R4901,02	ERJ6GMYJ391	M.RESISTOR CH 1/10W 390	2	
R4903,04	ERJ6GMYJ222	M.RESISTOR CH 1/10W 2.2K	2	
R4905,06	ERJ6GMYJ391	M.RESISTOR CH 1/10W 390	2	
R4907,08	ERJ6GMYJ222	M.RESISTOR CH 1/10W 2.2K	2	
R4909,10	ERJ6GMYJ221	M.RESISTOR CH 1/10W 220	2	
R4915-18	ERJ6GMYJ473	M.RESISTOR CH 1/10W 47K	4	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
R4921	ERJ6GMYG163	M.RESISTOR CH 1/10W 16K	1	
R4922,23	ERJ6GMYG433	M.RESISTOR CH 1/10W 43K	2	
R4924	ERJ6GMYG163	M.RESISTOR CH 1/10W 16K	1	
R4925	ERJ6GMYG473	M.RESISTOR CH 1/10W 47K	1	
R4926	ERJ6GMYG223	M.RESISTOR CH 1/10W 22K	1	
R4927,28	ERJ6GMYJ104	M.RESISTOR CH 1/10W 1M	2	
R4929	ERJ6GMYG223	M.RESISTOR CH 1/10W 22K	1	
R4930	ERJ6GMYG473	M.RESISTOR CH 1/10W 47K	1	
R4931	ERJ6GMYJ104	M.RESISTOR CH 1/10W 1M	1	
R6001	ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R6002,03	ERJ6GMYJ272	M.RESISTOR CH 1/10W 2.7K	2	
R6004	EROS2CKG2000	M.RESISTOR 1/4W 200	1	
R6005	ERJ6GMYJ471	M.RESISTOR CH 1/10W 470	1	
R6006	ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R6007-09	ERJ6GMYJ333	M.RESISTOR CH 1/10W 33K	3	
R6010,11	ERJ6GMYG223	M.RESISTOR CH 1/10W 22K	2	
R6012	ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R6013	ERJ6GMYJ223	M.RESISTOR CH 1/10W 22K	1	
R6015,16	ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	2	
R6017	ERJ6GMYJ223	M.RESISTOR CH 1/10W 22K	1	
R6018	ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R6019	ERJ6GMYJ223	M.RESISTOR CH 1/10W 22K	1	
R6020,21	ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	2	
R6022-24	ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	3	
R6025	ERJ6GMYJ272	M.RESISTOR CH 1/10W 2.7K	1	
R6027	ERJ6GMYJ101	M.RESISTOR CH 1/10W 100	1	
R6028	ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
R6029	ERJ6GMYJ183	M.RESISTOR CH 1/10W 18K	1	
R6030	ERJ6GMYJ101	M.RESISTOR CH 1/10W 100	1	
R6031	ERJ6GMYJ472	M.RESISTOR CH 1/10W 4.7K	1	
R6032,33	ERJ6GMYJ271	M.RESISTOR CH 1/10W 270	2	
R6034	ERJ6GMYJ223	M.RESISTOR CH 1/10W 22K	1	
R6035	ERJ6GMYJ104	M.RESISTOR CH 1/10W 1M	1	
R6036	ERJ6GMYJ123	M.RESISTOR CH 1/10W 12K	1	
R6037,38	ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	2	
R6039,40	ERJ6GMYJ223	M.RESISTOR CH 1/10W 22K	2	
R6041	ERJ6GMYJ221	M.RESISTOR CH 1/10W 220	1	
R6042	ERJ6GMYJ271	M.RESISTOR CH 1/10W 270	1	
R6044-49	ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	6	
R6050	ERJ6GMYJ473	M.RESISTOR CH 1/10W 47K	1	
R6051	ERJ6GMYJ271	M.RESISTOR CH 1/10W 270	1	
R6052	ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R6053	ERJ6GMYJ682	M.RESISTOR CH 1/10W 6.8K	1	
R6054	ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
R6055	ERJ6GMYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R6056,57	ERJ6GMYJ223	M.RESISTOR CH 1/10W 22K	2	
R6058,59	ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	2	
R6060	ERJ6GMYJ223	M.RESISTOR CH 1/10W 22K	1	
R6061,62	ERJ6GMYJ683	M.RESISTOR CH 1/10W 68K	2	
R6063	ERJ6GMYJ224	M.RESISTOR CH 1/10W 220K	1	
R6064	ERJ6GMYJ104	M.RESISTOR CH 1/10W 1M	1	
R6066	ERJ6GMYJ473	M.RESISTOR CH 1/10W 47K	1	
R6067	ERJ6GMYJ181	M.RESISTOR CH 1/10W 180	1	
R6068-70	ERJ6GMYJ332	M.RESISTOR CH 1/10W 3.3K	3	
R6071	ERDS2TJ391	C.RESISTOR 1/4W 390	1	
R6074	ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R6075	ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R6076	ERJ6GMYJ563	M.RESISTOR CH 1/10W 56K	1	
R6077	ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R6078	ERJ6GMYJ223	M.RESISTOR CH 1/10W 22K	1	
R6079	ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R6081	ERJ6GMYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R6082	ERJ6GMYJ223	M.RESISTOR CH 1/10W 22K	1	
R6083-86	ERJ6GMYJ473	M.RESISTOR CH 1/10W 47K	4	
R6087,88	ERJ6GMYJ332	M.RESISTOR CH 1/10W 3.3K	2	
R6089,90	ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	2	
R6091	ERJ6GMYJ473	M.RESISTOR CH 1/10W 47K	1	
R6092,93	ERJ6GMYJ271	M.RESISTOR CH 1/10W 270	2	
R6094,95	ERJ6GMYJ473	M.RESISTOR CH 1/10W 47K	2	
R6096	ERJ6GMYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R6097,98	ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	2	
R6099	ERJ6GMYJ822	M.RESISTOR CH 1/10W 8.2K	1	
R6100	ERJ6GMYJ473	M.RESISTOR CH 1/10W 47K	1	
R6101	ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R6102,03	ERJ6GMYJ272	M.RESISTOR CH 1/10W 2.7K	2	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
R6104	ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
R6106,07	ERJ6GMYJ221	M.RESISTOR CH 1/10W 220	2	
R6108	ERJ6GMYJ473	M.RESISTOR CH 1/10W 47K	1	
R6109	ERJ6GMYJ333	M.RESISTOR CH 1/10W 33K	1	
R6110	ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R6112	ERJ6GMYJ473	M.RESISTOR CH 1/10W 47K	1	
R6113	ERJ6GMYJ472	M.RESISTOR CH 1/10W 4.7K	1	
R6114	ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R6116	ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R6118	ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R6120	ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R6122	ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R6123	ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R6124	ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R6125	ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R7302	ERJ6GEYJ392	M.RESISTOR CH 1/10W 3.9K	1	
R7303	ERJ6GEYJ182	M.RESISTOR CH 1/10W 1.8K	1	
R7304	ERJ6GEYJ392	M.RESISTOR CH 1/10W 3.9K	1	
R7305	ERJ6GEYJ822	M.RESISTOR CH 1/10W 8.2K	1	
R7306	ERJ6GEYJ471	M.RESISTOR CH 1/10W 470	1	
R7307	ERJ6GEYJ104	M.RESISTOR CH 1/10W 100K	1	
R7308	ERJ6GEYJ273	M.RESISTOR CH 1/10W 27K	1	
R7309	ERDS2TJ102	C.RESISTOR 1/4W 1K	1	
R7310	ERJ6GEYJ474	M.RESISTOR CH 1/10W 470K	1	
R7311	ERJ6GEYJ562	M.RESISTOR CH 1/10W 5.6K	1	
R7312	ERJ6GEYJ563	M.RESISTOR CH 1/10W 56K	1	
R7313	ERJ6GEYJ824	M.RESISTOR CH 1/10W 820K	1	
R7314,15	ERJ6GEYJ224	M.RESISTOR CH 1/10W 220K	2	
R7316	ERJ6GEYJ473	M.RESISTOR CH 1/10W 47K	1	
R7317	ERJ6GEYJ393	M.RESISTOR CH 1/10W 39K	1	
R7318	ERJ6GEYJ153	M.RESISTOR CH 1/10W 15K	1	
R7321	ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	
R7322	ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R7323	ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	
R7324,25	ERJ6GEYJ271	M.RESISTOR CH 1/10W 270	2	
R7329	ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R7330	ERJ6GEYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R7334-37	ERJ6GEYJ471	M.RESISTOR CH 1/10W 470	4	
R7338	ERJ6GEYJ182	M.RESISTOR CH 1/10W 1.8K	1	
R7339	ERJ6GEYJ330	M.RESISTOR CH 1/10W 33	1	
R7340	ERJ6GEYJ152	M.RESISTOR CH 1/10W 1.5K	1	
R7341	ERJ6GEYJ681	M.RESISTOR CH 1/10W 680	1	
R7342	ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	
R7345	ERJ6GEYJ182	M.RESISTOR CH 1/10W 1.8K	1	
R7346	ERJ6GEYJ221	M.RESISTOR CH 1/10W 220	1	
R7347	ERJ6GEYJ681	M.RESISTOR CH 1/10W 680	1	
R7348	ERJ6GEYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R7349	ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R7351-53	ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	3	
R7354,55	ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	2	
R7403	ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R7407,08	ERJ6GMYJ221	M.RESISTOR CH 1/10W 220	2	
R7410-12	ERJ6GMYJ221	M.RESISTOR CH 1/10W 220	3	
R7413-19	ERJ6GMYJ332	M.RESISTOR CH 1/10W 3.3K	7	
R7420	ERJ6GMYJ152	M.RESISTOR CH 1/10W 1.5K	1	
R7421-23	ERJ6GMYJ332	M.RESISTOR CH 1/10W 3.3K	3	
R7651	ERJ6GEYJ224	M.RESISTOR CH 1/10W 220K	1	
R7652	ERJ6GEYJ331	M.RESISTOR CH 1/10W 330	1	
R7653	ERJ6GEYF124	M.RESISTOR CH 1/10W 120K	1	
R7654	ERJ6GEYJ223	M.RESISTOR CH 1/10W 22K	1	
R7655	ERJ6GEYJ334	M.RESISTOR CH 1/10W 330K	1	
R7676	ERG1SJ152	M.RESISTOR 1W 1.5K	1	
R7901	ERJ3GEYJ471	M.RESISTOR CH 1/16W 470	1	
R7902	ERJ3GEYJ821	M.RESISTOR CH 1/16W 820	1	
R7903	ERJ3GEYJ472	M.RESISTOR CH 1/16W 4.7K	1	
R7904	ERJ6GEYJ152	M.RESISTOR CH 1/10W 1.5K	1	
R7905	ERJ6GEYJ471	M.RESISTOR CH 1/10W 470	1	
R7906	ERJ6GEYJ150	M.RESISTOR CH 1/10W 15	1	
R7907	ERJ6GEYJ561	M.RESISTOR CH 1/10W 560	1	
R7908	ERJ6GEYJ152	M.RESISTOR CH 1/10W 1.5K	1	
R7909-12	ERJ6GEYJ331	M.RESISTOR CH 1/10W 330	4	
R7913-15	ERJ3GEYJ682	M.RESISTOR CH 1/16W 6.8K	3	
R7917	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	
R7918-21	ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	4	
R7922	ERJ3GEYJ563	M.RESISTOR CH 1/16W 56K	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
R7923	ERJ3GEYJ394	M.RESISTOR CH 1/16W 390K	1	
R7924-26	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	3	
R7927	ERJ3GEYJ562	M.RESISTOR CH 1/16W 5.6K	1	
R7928	ERJ3GEYJ102	M.RESISTOR CH 1/16W 1K	1	
R7929	ERJ3GEYJ563	M.RESISTOR CH 1/16W 56K	1	
R7930	ERJ3GEYJ394	M.RESISTOR CH 1/16W 390K	1	
R7931-33	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	3	
R7934	ERJ3GEYJ562	M.RESISTOR CH 1/16W 5.6K	1	
R7935	ERJ3GEYJ102	M.RESISTOR CH 1/16W 1K	1	
R7936	ERJ3GEYJ223	M.RESISTOR CH 1/16W 22K	1	
R7937	ERJ3GEYJ393	M.RESISTOR CH 1/16W 39K	1	
R7938	ERJ3GEYJ222	M.RESISTOR CH 1/16W 2.2K	1	
R7939	ERJ3GEYJ224	M.RESISTOR CH 1/16W 220K	1	
R7940	ERJ3GEYJ181	M.RESISTOR CH 1/16W 180	1	
R7941	ERJ3GEYJ681	M.RESISTOR CH 1/16W 680	1	
R7942	ERJ3GEYJ393	M.RESISTOR CH 1/16W 39K	1	
R7943	ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	1	
R7944	ERJ3GEYJ392	M.RESISTOR CH 1/16W 3.9K	1	
R7945	ERJ3GEYJ822	M.RESISTOR CH 1/16W 8.2K	1	
R7946,47	ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	2	
R7948	ERJ3GEYJ472	M.RESISTOR CH 1/16W 4.7K	1	
R7949	ERJ3GEYJ822	M.RESISTOR CH 1/16W 8.2K	1	
R7950	ERJ3GEYJ472	M.RESISTOR CH 1/16W 4.7K	1	
R7951,52	ERJ3GEYJ822	M.RESISTOR CH 1/16W 8.2K	2	
R7953	ERJ3GEYJ472	M.RESISTOR CH 1/16W 4.7K	1	
R7954,55	ERJ3GEYJ823	M.RESISTOR CH 1/16W 82K	2	
R7956	ERJ3GEYJ822	M.RESISTOR CH 1/16W 8.2K	1	
R7957	ERJ3GEYJ472	M.RESISTOR CH 1/16W 4.7K	1	
R7958,59	ERJ3GEYJ823	M.RESISTOR CH 1/16W 82K	2	
R7960,61	ERJ6GEYJ471	M.RESISTOR CH 1/10W 470	2	
R7964	ERJ3GEYJ272	M.RESISTOR CH 1/16W 2.7K	1	
R7965-72	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	8	
R7973-77	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	5	
R797B	ERJ3GEYJ104	M.RESISTOR CH 1/16W 100K	1	
R7979	ERJ3GEYJ152	M.RESISTOR CH 1/16W 1.5K	1	
R7980	ERJ3GEYJ104	M.RESISTOR CH 1/16W 100K	1	
R7981,82	ERJ3GEYJ102	M.RESISTOR CH 1/16W 1K	2	
R7983,84	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	2	
R7985,86	ERJ3GEYJ271	M.RESISTOR CH 1/16W 270	2	
R7987	ERJ3GEYJ563	M.RESISTOR CH 1/16W 56K	1	
R7988	ERJ3GEYJ121	M.RESISTOR CH 1/16W 120	1	
R7989	ERDS2TJ823	C.RESISTOR 1/4W 82K	1	
RX3401	EXBF8E102J	RESISTOR-RESISTOR	1	
SW3901	VSS0385	SWITCH	1	
T703	EIV5EC057A	TRANSFORMER	1	
T704	EIV5EC006A1	TRANSFORMER	1	
T4701	VLT0695	TRANSFORMER	1	
T4702	VLT0696	TRANSFORMER	1	
T7301	EIR7QG001B	TRANSFORMER	1	
T7302,03	EIL7QH012Q	TRANSFORMER	2	
T7304	EIS5EC007A	TRANSFORMER	1	
T7305	EIS5EC005A	TRANSFORMER	1	
TR	VJS3481	CONNECTOR (FEMALE)	1	
VR301	EVN49CA00B23	V.RESISTOR 2K	1	
VR302	EVN49CA00B13	V.RESISTOR	1	
VR303	EVNCBAA00B13	V.RESISTOR	1	
VR304	EVN49CA00B13	V.RESISTOR	1	
VR701	EVMEASA00B53	V.RESISTOR	1	
VR741	EVNCBAA00B14	V.RESISTOR	1	
VR801,02	EVMEASA00B13	V.RESISTOR	2	
VR803	EVMEASA00B14	V.RESISTOR	1	
VR804	EVN49CA00B53	V.RESISTOR	1	
VR2001-05	EVNDXAA00B54	V.RESISTOR 50K	5	
VR3001-03	EVNDXAA00B23	V.RESISTOR 5K	3	
VR3301	EVMF6SA00B24	V.RESISTOR 20K	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
VR3302	EVN49CA00B54	V.RESISTOR	1	
VR3304,05	EVN49CA00B52	V.RESISTOR 500	2	
VR3307	EVN49CA00B54	V.RESISTOR	1	
VR3901	EVMEASA00B24	V.RESISTOR	1	
VR4002	EVNDXAA00B25	V.RESISTOR 200K	1	
VR4501	EVMECSA00B53	V.RESISTOR	1	
VR4502	EVMEASA00BY4	V.RESISTOR	1	
VR4507	EVMEASA00BY4	V.RESISTOR	1	
VR4509	EVMECSA00BY3	V.RESISTOR	1	
VR4512	EVNCBAA00B52	V.RESISTOR	1	
VR4550	EVMECSA00BS3	V.RESISTOR	1	
VR4551,52	EVMEASA00B55	V.RESISTOR	2	
VR7301	EVMEASA00B14	V.RESISTOR	1	
VR7326	EVMEASA00B52	V.RESISTOR	1	
VR7328	EVMEASA00B52	V.RESISTOR	1	
VR7340	EVNCBAA00B14	V.RESISTOR	1	
VR7342	EVNCBAA00B53	V.RESISTOR	1	
VR7344	EVNCBAA00B14	V.RESISTOR	1	
VR7660	EVNCBAA00B15	V.RESISTOR	1	
VR7901,02	EVNCBAA00B14	V.RESISTOR	2	
VR7903	EVTEASA00B55	V.RESISTOR	1	
X710	EFCH38MGQ1	CRYSTAL OSCILLATOR	1	
X713	EFCS5R5MW5	CRYSTAL OSCILLATOR	1	
X801	VSX0406	CRYSTAL OSCILLATOR	1	
X3302	EF0GC3584A5	CRYSTAL OSCILLATOR	1	
X3501	VSX0574	CRYSTAL OSCILLATOR	1	
X6001	VSX0583	CRYSTAL OSCILLATOR	1	
X6002	EF0EC7374	CRYSTAL OSCILLATOR	1	
X7001	VSQ0565	CRYSTAL OSCILLATOR	1	
X7301,02	EFCT5R5MS5B	CRYSTAL OSCILLATOR	2	
X7303,04	EFCT5R74MS5B	CRYSTAL OSCILLATOR	2	
X7305	ELB5A016	CRYSTAL OSCILLATOR	1	
X7901	VSX0514	CRYSTAL OSCILLATOR	1	
X7902	VSX0512	CRYSTAL OSCILLATOR	1	
X7903	EFCA5504BF	CRYSTAL OSCILLATOR	1	
		MISCELLANEOUS		
	VEK6605	EARTH WIRE	1	(TV DEMODU-POWER SHILED CASE)
	VJH0683	RF ANT TERMINA PLATE	1	
	VEE8682	WIRE CABLE	1	(P1001-P1102)
	VEE8683	WIRE CABLE	1	(P1002-P1103)
	VEE8688	WIRE CABLE	1	(P2001-P2902)
	VEE9001	WIRE CABLE	1	(POWER TR.-P2003)
	VEE8685	WIRE CABLE	1	(P4002-P6502)
	VEE8686	WIRE CABLE	1	(P6003-P7504)
	VEE8837	WIRE CABLE	1	(P3002-P7503)
	VWJ0775	FLAT CARD CABLE	1	(P2004-P1507)
	VWJ0776	FLAT CARD CABLE	1	(P3001-P501)
	VWJ0778	FLAT CARD CABLE	1	(P7401-P7501)
	VWJ0801	FLAT CARD CABLE	1	(P7402-P7502)
	VMA6768	EARTH ANGLE	1	
	VJF1031	CLAMPER	1	
	VEE8687	WIRE CABLE	1	(P4003-P1509)
	VEE8834	WIRE CABLE	1	(P3003-P9001)
	VEE8835	WIRE CABLE	1	(P6004-P9002)
	ENV578D7H6	TUNER	1	<!>FOR TV DEMODU.
	ENC17984	RF CONVERTER	1	<!>FOR TV DEMODU.
	VSC4025	SHILED COVER (MAIN)	1	FOR TV DEMODULATOR
	VSC3241	SHILED COVER (TOP)	1	FOR TV DEMODULATOR
	VMX2233	SPACER	1	FOR SUB LUMI. & CHRO.
	VEJ1438	I/O JACK PLATE	1	FOR I/O PACK C.B.A.
	VSC3553	SHIELD COVER (MAIN)	1	FOR NICAM DECORDER
	VSC3554	SHIELD COVER (TOP)	1	FOR NICAM DECORDER
	VSC3555	SHIELD COVER (BOTTOM)	1	FOR NICAM DECORDER
	■ VEP03A53A	TBC C.B.A.		(RTL)
C9001	ECEA0JKA470	E.CAPACITOR 6.3V 47U	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
C9002	ECQB1H473JZ	F.CAPACITOR 50V 0.047U	1	
C9003	ECEA1HKN010	E.CAPACITOR 50V 1U	1	
C9004	ECEA0JKA221	E.CAPACITOR 6.3V 220U	1	
C9005	ECEA0JKA470	E.CAPACITOR 6.3V 47U	1	
C9006	ECEA1HKAR47	E.CAPACITOR 50V 0.47U	1	
C9007	ECQB1H473JZ	F.CAPACITOR 50V 0.047U	1	
C9008	ECEA0JKA470	E.CAPACITOR 6.3V 47U	1	
C9009	ECQB1H473JZ	F.CAPACITOR 50V 0.047U	1	
C9010	ECEA1EKA4R7	E.CAPACITOR 25V 4.7U	1	
C9011	ECQB1H333KZ	F.CAPACITOR 50V 0.033U	1	
C9012	ECUM1H332KBN	C.CAPACITOR CH 50V 3300P	1	
C9013	ECUM1H101JCN	C.CAPACITOR CH 50V 100P	1	
C9014	ECEA1HKAR47	E.CAPACITOR 50V 0.47U	1	
C9015	ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C9016	ECUM1H330JCN	C.CAPACITOR CH 50V 33P	1	
C9017	ECQB1H223KF	P.CAPACITOR 50V 0.022U	1	
C9018	ECEA1HKA3R3	E.CAPACITOR 50V 3.3U	1	
C9019	ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C9020,21	ECEA1HKA2R2	E.CAPACITOR 50V 2.2U	2	
C9022	ECEA1CKA100	E.CAPACITOR 16V 10U	1	
C9023	ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C9024	ECEA1EKA4R7	E.CAPACITOR 25V 4.7U	1	
C9025	ECUM1H152KBN	C.CAPACITOR CH 50V 1500P	1	
C9026	ECUM1H331JCN	C.CAPACITOR CH 50V 330P	1	
C9027	ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C9028	ECEA0JKA470	E.CAPACITOR 6.3V 47U	1	
C9029	ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C9030	ECEA1CKA100	E.CAPACITOR 16V 10U	1	
C9031,32	ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	2	
C9033	ECUM1H680JCN	C.CAPACITOR CH 50V 68P	1	
C9034	ECUM1H270JCN	C.CAPACITOR CH 50V 27P	1	
C9035	ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C9036,37	ECEA1EKN4R7	E.CAPACITOR 25V 4.7U	2	
C9038	ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C9039	ECEA0JKA220	E.CAPACITOR 6.3V 220U	1	
C9040	ECEA0JKA470	E.CAPACITOR 6.3V 47U	1	
C9041	ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C9042	ECEA0JKA470	E.CAPACITOR 6.3V 47U	1	
C9043-50	ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	8	
C9051	ECEA0JKA220	E.CAPACITOR 6.3V 220U	1	
C9052	ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C9054	ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C9055	ECEA1CKA100	E.CAPACITOR 16V 10U	1	
C9056	ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C9057	ECEA0JKA220	E.CAPACITOR 6.3V 220U	1	
C9058	ECEA0JKA470	E.CAPACITOR 6.3V 47U	1	
C9059	ECEA0JKA220	E.CAPACITOR 6.3V 220U	1	
C9060	ECUM1H050CCN	C.CAPACITOR CH 50V 5P	1	
C9061	ECUM1H020CCN	C.CAPACITOR CH 50V 2P	1	
C9062	ECEA0JKA221	E.CAPACITOR 6.3V 220U	1	
C9063	ECUM1H222KBN	C.CAPACITOR CH 50V 2200P	1	
C9064	ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C9065	ECUM1H682KBN	C.CAPACITOR CH 50V 6800P	1	
C9066	ECEA0JKA470	E.CAPACITOR 6.3V 47U	1	
C9067-70	ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	4	
C9071	ECEA0JKA470	E.CAPACITOR 6.3V 47U	1	
C9072	ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C9073	ECEA0JKA470	E.CAPACITOR 6.3V 47U	1	
C9076	ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C9077	ECEA1CKA100	E.CAPACITOR 16V 10U	1	
C9078	ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C9079	ECEA0JKA470	E.CAPACITOR 6.3V 47U	1	
C9080	ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C9081,82	ECEA0JKA470	E.CAPACITOR 6.3V 47U	2	
C9083,84	ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	2	
C9085,86	ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	2	
C9087	ECEA1CKA100	E.CAPACITOR 16V 10U	1	
C9088	ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C9089	ECEA0JKA470	E.CAPACITOR 6.3V 47U	1	
C9098-00	ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	3	
C9101	ECEA0JKA220	E.CAPACITOR 6.3V 220U	1	
C9102	ECEA0JKA470	E.CAPACITOR 6.3V 47U	1	
C9103	ECUM1H332KBN	C.CAPACITOR CH 50V 3300P	1	
C9501	ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C9502,03	ECUM1H330JCN	C.CAPACITOR CH 50V 33P	2	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
C9504	ECUM1H101JCN	C.CAPACITOR CH 50V 100P	1	
C9505	ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C9506	ECEA1HKA3R3	E.CAPACITOR 50V 3.3U	1	
C9507,08	ECEA1CKA100	E.CAPACITOR 16V 10U	2	
C9509,10	ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	2	
C9511	ECEA1HKA3R3	E.CAPACITOR 50V 3.3U	1	
C9512	ECEA1CKA100	E.CAPACITOR 16V 10U	1	
C9513	ECEA1HKAR22	E.CAPACITOR 50V 0.22U	1	
C9514	ECEA1CKA100	E.CAPACITOR 16V 10U	1	
C9515	ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C9516	ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C9517	ECEA1HKA010	E.CAPACITOR 50V 1U	1	
C9518	ECEA1CKA470	E.CAPACITOR 16V 47U	1	
C9519	ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C9520-22	ECEA1CKA100	E.CAPACITOR 16V 10U	3	
C9523,24	ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	2	
C9525,26	ECEA1CKA100	E.CAPACITOR 16V 10U	2	
D9501	1SS254	DIODE	1	
FL9001-05	VLF0633	COIL	5	
FL9006	VLF0634	COIL	1	
FL9007	ELKAW103EB	FILTER	1	
FL9008	VLF0634	COIL	1	
FL9009	VLF0839	FILTER	1	
FL9010	VLF0838	FILTER	1	
FL9011	VLF0874	FILTER	1	
FL9012	VLF0855	FILTER	1	
FL9013	ELB4P034	FILTER	1	
FL9014	VLF0875	FILTER	1	
FL9015-18	VLF0634	COIL	4	
FL9019-21	VLF0630	COIL	3	
FL9022-26	ELKAW103EB	FILTER	5	
FL9501	ELB4H054	FILTER	1	
IC9001	AN3942SB	IC	1	
IC9002	AN3496S	IC	1	
IC9003	MN74HC4066S	IC	1	
IC9004	HA19211BNT	IC	1	
IC9006	AN3915S	IC	1	
IC9007	SC371020FU	IC	1	
IC9008	SC371026FU	IC	1	
IC9501	CXL1009P	IC	1	
IC9502	AN78L09	IC	1	
IC9503	M52055FP	IC	1	
L9001	VLQEL05S220J	COIL 22UH	1	
L9002,03	ELESE101KA	COIL 100UH	2	
L9004	ELESE680KA	COIL H	1	
L9005	ELESE270KA	COIL H	1	
L9006	VLQ0188J2R2	COIL 2.2UH	1	
L9007	ELESE101KA	COIL 100UH	1	
L9008,09	VLQ0188J2R2	COIL 2.2UH	2	
L9010	VLQ0188J6R8	COIL 6.8UH	1	
L9011-14	VLQ0188J2R2	COIL 2.2UH	4	
L9018,19	VLP0054	COIL	2	
L9024	VLP0054	COIL	1	
L9501	ELESE101KA	COIL 100UH	1	
L9502	VLP0054	COIL	1	
L9503	VLP0053	COIL	1	
L9504,05	ELESE101KA	COIL 100UH	2	
L9506	VLP0054	COIL	1	
P9001	VJP1393T	CONNECTOR (MALE) 13P	1	
P9002	VJP1235T	CONNECTOR (MALE) 8P	1	
Q9001	MSB709	TRANSISTOR	1	
Q9003,04	MSD601	TRANSISTOR	2	
Q9006-09	MSD601	TRANSISTOR	4	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
Q9010,11	MSB709	TRANSISTOR	2	
Q9012	MSD601	TRANSISTOR	1	
Q9013	MSB709	TRANSISTOR	1	
Q9014	2SA1022	TRANSISTOR	1	
Q9015	MSD601	TRANSISTOR	1	
Q9016	MSC2295	TRANSISTOR	1	
Q9017	MSD601	TRANSISTOR	1	
Q9018	MSB709	TRANSISTOR	1	
Q9019	MSD601	TRANSISTOR	1	
Q9020	MSC2295	TRANSISTOR	1	
Q9021	MSD601	TRANSISTOR	1	
Q9022	MSB709	TRANSISTOR	1	
Q9023	MSD601	TRANSISTOR	1	
Q9024	MSB709	TRANSISTOR	1	
Q9025	MSD601	TRANSISTOR	1	
Q9026,27	MSB709	TRANSISTOR	2	
Q9501,02	MSC2295	TRANSISTOR	2	
Q9503	MSB709	TRANSISTOR	1	
Q9504	MSD601	TRANSISTOR	1	
Q9505	MSB709	TRANSISTOR	1	
Q9506	MSD601	TRANSISTOR	1	
Q9507	MSB709	TRANSISTOR	1	
QR9001	MRN1404	TRANSISTOR-RESISTOR	1	
QR9004	MRN1404	TRANSISTOR-RESISTOR	1	
QR9007	MRN1404	TRANSISTOR-RESISTOR	1	
QR9010	MRN1404	TRANSISTOR-RESISTOR	1	
R9001-04	ERJ6GMYJ101	M.RESISTOR CH 1/10W 100	4	
R9005	ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R9006	ERJ6GMYJ223	M.RESISTOR CH 1/10W 22K	1	
R9007,08	ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	2	
R9009	ERJ6GMYJ473	M.RESISTOR CH 1/10W 47K	1	
R9010-17	ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	8	
R9021-23	ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	3	
R9024	ERJ6GMYJ472	M.RESISTOR CH 1/10W 4.7K	1	
R9027-29	ERJ6GMYJ223	M.RESISTOR CH 1/10W 22K	3	
R9030	ERJ6GMYJ153	M.RESISTOR CH 1/10W 15K	1	
R9031	ERJ6GMYJ223	M.RESISTOR CH 1/10W 22K	1	
R9032	ERJ6GMYJ473	M.RESISTOR CH 1/10W 47K	1	
R9037	ERJ6GMYJ333	M.RESISTOR CH 1/10W 33K	1	
R9038	ERJ6GMYJ561	M.RESISTOR CH 1/10W 560	1	
R9039	ERJ6GMYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R9040	ERJ6GMYJ681	M.RESISTOR CH 1/10W 680	1	
R9041	ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R9042	ERJ6GMYJ472	M.RESISTOR CH 1/10W 4.7K	1	
R9043	ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R9044	ERJ6GMYJ681	M.RESISTOR CH 1/10W 680	1	
R9045	ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R9046	ERJ6GMYJ391	M.RESISTOR CH 1/10W 390	1	
R9047,48	ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	2	
R9049	ERJ6GMYJ683	M.RESISTOR CH 1/10W 68K	1	
R9050	ERJ6GMYJ331	M.RESISTOR CH 1/10W 330	1	
R9051,52	ERJ6GMYJ683	M.RESISTOR CH 1/10W 68K	2	
R9053	ERJ6GMYJ333	M.RESISTOR CH 1/10W 33K	1	
R9054,55	ERJ6GMYJ683	M.RESISTOR CH 1/10W 68K	2	
R9056	ERJ6GMYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R9057	ERJ6GMYJ333	M.RESISTOR CH 1/10W 33K	1	
R9058	ERJ6GMYJ223	M.RESISTOR CH 1/10W 22K	1	
R9059,60	ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	2	
R9061	ERJ6GMYJ681	M.RESISTOR CH 1/10W 680	1	
R9062	ERJ6GMYJ391	M.RESISTOR CH 1/10W 390	1	
R9063	ERJ6GMYJ202	M.RESISTOR CH 1/10W 2K	1	
R9064	ERJ6GMYJ132	M.RESISTOR CH 1/10W 1.3K	1	
R9065	ERJ6GMYJ432	M.RESISTOR CH 1/10W 4.3K	1	
R9066	ERJ6GMYJ153	M.RESISTOR CH 1/10W 15K	1	
R9067	ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R9068-70	ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	3	
R9071	ERJ6GMYJ331	M.RESISTOR CH 1/10W 330	1	
R9072	ERJ6GMYJ561	M.RESISTOR CH 1/10W 560	1	
R9073	ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R9074	ERJ6GMYJ331	M.RESISTOR CH 1/10W 330	1	
R9075	ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
R9076	ERJ6GMYJ561	M.RESISTOR CH 1/10W 560	1	
R9077	ERJ6GMYJ331	M.RESISTOR CH 1/10W 330	1	
R9078	ERJ6GMYJ561	M.RESISTOR CH 1/10W 560	1	
R9079	ERJ6GMYJ331	M.RESISTOR CH 1/10W 330	1	
R9080,81	ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	2	
R9082	ERJ6GMYJ561	M.RESISTOR CH 1/10W 560	1	
R9084	ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R9087	ERJ6GMYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R9088	ERJ6GMYJ101	M.RESISTOR CH 1/10W 100	1	
R9093	ERJ6GMYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R9094	ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R9095	ERJ6GMYJ101	M.RESISTOR CH 1/10W 100	1	
R9096	ERJ6GMYJ123	M.RESISTOR CH 1/10W 12K	1	
R9097	ERJ6GMYJ333	M.RESISTOR CH 1/10W 33K	1	
R9098	ERJ6GMYJ182	M.RESISTOR CH 1/10W 1.8K	1	
R9099	ERJ6GMYJ391	M.RESISTOR CH 1/10W 390	1	
R9100,01	ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	2	
R9104	ERJ6GMYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R9105	ERJ6GMYJ822	M.RESISTOR CH 1/10W 8.2K	1	
R9106	ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R9107	ERJ6GMYJ392	M.RESISTOR CH 1/10W 3.9K	1	
R9108,09	ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	2	
R9501,02	ERJ6GMYJ223	M.RESISTOR CH 1/10W 22K	2	
R9503,04	ERJ6GMYJ221	M.RESISTOR CH 1/10W 220	2	
R9505	ERJ6GMYJ105	M.RESISTOR CH 1/10W 1M	1	
R9506	ERJ6GMYJ224	M.RESISTOR CH 1/10W 220K	1	
R9507	ERJ6GMYJ681	M.RESISTOR CH 1/10W 680	1	
R9508	ERJ6GMYJ471	M.RESISTOR CH 1/10W 470	1	
R9509-13	ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	5	
R9514,15	ERJ6GMYJ332	M.RESISTOR CH 1/10W 3.3K	2	
R9516	ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R9517,18	ERJ6GMYJ472	M.RESISTOR CH 1/10W 4.7K	2	
R9519	ERJ6GMYJ333	M.RESISTOR CH 1/10W 33K	1	
R9520	ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
VR9001	EVMF6SA00B23	V.RESISTOR 2K	1	
VR9002	EVNDXAA00B54	V.RESISTOR 50K	1	
VR9003	EVMF6SA00B13	V.RESISTOR	1	
VR9004	EVNDXAA00B24	V.RESISTOR 20K	1	
VR9005,06	EVMF6SA00B14	V.RESISTOR 10K	2	
VR9007	EVMF6SA00B13	V.RESISTOR	1	
VR9501	EVMF6SA00B23	V.RESISTOR 2K	1	
X9002	VSX0617	CRYSTAL OSCILIATOR	1	
X9501	VSX0323	CRYSTAL OSCILIATOR	1	
		MISCELLANEOUS		
	VSC4116	SHIELD COVER (MAIN)	1	
	VSC3620	SHIELD COVER (BOTTOM)	1	
	VSC3618	SHIELD COVER (TOP)	1	
	VMX1921	SPACER	1	
	XTN3+6F	SCREW	4	
■	VEP05176G	HEAD AMP C.B.A.		(RTL)
C503	ECUM1C105ZFN	C.CAPACITOR CH 16V 1U	1	
C505-08	ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	4	
C509	ECUM1H332KBN	C.CAPACITOR CH 50V 3300P	1	
C510,11	ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	2	
C512	ECUM1H102KBN	C.CAPACITOR CH 50V 1000P	1	
C513	ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C514	ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C515,16	ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	2	
C517,18	ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	2	
C519,20	ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	2	
C521	ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C523-25	ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	3	
C526	VCEA0JAC221	E.CAPACITOR 6.3V 220U	1	
C527	ECUM1H102KBN	C.CAPACITOR CH 50V 1000P	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
C531	ECUM1H330JCN	C.CAPACITOR CH 50V 33P	1	
C532	ECUM1H560JCN	C.CAPACITOR CH 50V 56P	1	
C533,34	ECUM1H121JCN	C.CAPACITOR CH 50V 120P	2	
C535	ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C536	ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C537	ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C538,39	ECUM1H680JCN	C.CAPACITOR CH 50V 68P	2	
C540	ECEA1CK470	E.CAPACITOR 16V 47U	1	
C551	ECUM1H102KBN	C.CAPACITOR CH 50V 1000P	1	
C552-54	ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	3	
C555	ECEA0JPK221	E.CAPACTIOR 6.3V 220U	1	
C556,57	ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	2	
C559	ECUM1C105ZFN	C.CAPACITOR CH 16V 1U	1	
C560,61	ECUM1H471JCN	C.CAPACITOR CH 50V 470P	2	
C562,63	ECUM1H101JCN	C.CAPACITOR CH 50V 100P	2	
C564	ECUM1C105ZFN	C.CAPACITOR CH 16V 1U	1	
C565	ECUM1H101JCN	C.CAPACITOR CH 50V 100P	1	
C566	ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C567	ECUM1H102KBN	C.CAPACITOR CH 50V 1000P	1	
C569	ECUM1C105ZFN	C.CAPACITOR CH 16V 1U	1	
IC501	AN3336SB	IC	1	
IC502	AN3370K	IC	1	
IC551	BA7743FS	IC	1	
L501-03	VLQ0540K330	COIL 33UH	3	
L504	VLQ0540J5R6	COIL 5.6UH	1	
L551,52	VLQ0540K330	COIL 33UH	2	
P501	VJS3537B020G	CONNECTOR (FEMALE) 20P	1	
P502	VJS2603	CONNECTOR (FEMALE)	1	
Q501	MSB709	TRANSISTOR	1	
Q502	MSD601	TRANSISTOR	1	
QR501	MRN2404	TRANSISTOR-RESISTOR	1	
R501	ERJ6GMYJ101	M.RESISTOR CH 1/10W 100	1	
R502	ERJ6GEYJ152	M.RESISTOR CH 1/10W 1.5K	1	
R503	ERJ6GMYG752	M.RESISTOR CH 1/10W 7.5K	1	
R504	ERJ6GMYJ333	M.RESISTOR CH 1/10W 33K	1	
R505	ERJ6GMYJ182	M.RESISTOR CH 1/10W 1.8K	1	
R506	ERJ6GMYJ392	M.RESISTOR CH 1/10W 3.9K	1	
R507	ERJ6GMYJ391	M.RESISTOR CH 1/10W 390	1	
R508	ERJ6GMYJ331	M.RESISTOR CH 1/10W 330	1	
R509-12	ERJ6GMYJ101	M.RESISTOR CH 1/10W 100	4	
R513	ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R514	ERJ6GMYJ274	M.RESISTOR CH 1/10W 270K	1	
R517	ERJ6GMYJ100	M.RESISTOR CH 1/10W 10	1	
R518,19	ERJ6GMYJ101	M.RESISTOR CH 1/10W 100	2	
R520	ERJ6GMYJ152	M.RESISTOR CH 1/10W 1.5K	1	
R521,22	ERJ6GMYJ822	M.RESISTOR CH 1/10W 8.2K	2	
R523	ERJ6GMYJ152	M.RESISTOR CH 1/10W 1.5K	1	
R524	VRE0034E182	M.RESISTOR CH 1/10W 1.8K	1	
R525	VRE0034E103	M.RESISTOR CH 1/10W 10K	1	
R526	ERJ6GMYG133	M.RESISTOR CH 1/10W 13K	1	
R551	ERJ6GMYJ473	M.RESISTOR CH 1/10W 47K	1	
R552	ERJ6GMYJ391	M.RESISTOR CH 1/10W 390	1	
R553	ERJ6GMYJ273	M.RESISTOR CH 1/10W 27K	1	
R554	ERJ6GMYJ243	M.RESISTOR CH 1/10W 24K	1	
R556	ERJ6GMYJ333	M.RESISTOR CH 1/10W 33K	1	
R557	ERJ6GMYJ182	M.RESISTOR CH 1/10W 1.8K	1	
R558	ERJ6GMYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R559,60	ERJ6GMYJ152	M.RESISTOR CH 1/10W 1.5K	2	
R561	ERJ6GMYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R562	ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R563	VRE0034E100	M.RESISTOR CH 1/10W 10	1	
R564	ERJ6GMYJ224	M.RESISTOR CH 1/10W 220K	1	
R565	ERJ6GMYJ473	M.RESISTOR CH 1/10W 47K	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
R566	ERJ6GMYJ273	M.RESISTOR CH 1/10W 27K	1	
R567	ERJ6GMYJ153	M.RESISTOR CH 1/10W 15K	1	
R568	ERJ6GMYJ271	M.RESISTOR CH 1/10W 270	1	
R569	ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R570	ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
		MISCELLANEOUS		
	VSC3714	SHILED COVER (TOP)	1	
	VSC3478	SHILED COVER (MAIN)	1	
	VSC3715	SHILED COVER (BOTTOM)	1	
	■ VEP06926C	VR C.B.A.		(RTL)
C6501,02	ECUM1H223KBN	C.CAPACITOR CH 50V 0.022U	2	
C6503,04	ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	2	
C6505	ECEA1HKA3R3	E.CAPACITOR 50V 3.3U	1	
C6506	VCEA1HAC3R3	CAPACITOR	1	
C6507	ECEA1AKA330	E.CAPACITOR 10V 33U	1	
C6508	ECEA1CKA330	E.CAPACITOR 16V 33U	1	
C6509	ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C6510	ECEA0JK470	E.CAPACITOR 6.3V 47U	1	
C6511-14	ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	4	
C6515,16	ECUM1H101JCN	C.CAPACITOR CH 50V 100P	2	
IC6501	VCR0172	IC	1	
IR6501	VEK6407	IR RECEIVER UNIT	1	
L6501,02	ELESE471KA	COIL	2	
L6503,04	ELESE221KA	COIL 220UH	2	
L6506,07	ELESE101KA	COIL 100UH	2	
P6502	VJP1251T	CONNECTOR (MALE) 11P	1	
PS6501,02	VJS3405A011A	CONNECTOR (FEMALE) 11P	2	
R6501	ERJ6GEYG332	M.RESISTOR CH 1/10W 3.3K	1	
R6502	ERJ6GEYG331	M.RESISTOR CH 1/10W 330	1	
R6503,04	ERJ6GEYG271	M.RESISTOR CH 1/10W 270	2	
R6505	ERJ6GEYG332	M.RESISTOR CH 1/10W 3.3K	1	
R6506	ERJ6GEYG331	M.RESISTOR CH 1/10W 330	1	
R6508,09	ERJ6GEYJ222	M.RESISTOR CH 1/10W 2.2K	2	
R6511	ERDS2TJ470	C.RESISTOR 1/4W 47	1	
SW6501,02	EVQ11409K	SWITCH	2	
VR6501	EWAKABX15C23	V.RESISTOR	1	
VR6502	EWAKFKX15B24	V.RESISTOR	1	
VR6503	EWANYJX1054J	V.RESISTOR	1	
		MISCELLANEOUS		
	VEJ1429	FRONT JACK PLATE	1	
	VYC0599	REC VR COVER UNIT	1	
	VGU4495	REC VR KNOB	1	
	■ VEP07739Q	TIMER C.B.A.		(RTL)NV-HS1000B
C1701	ECEA1CKA101	E.CAPACITOR 16V 100U	1	
C1702	ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
C1703	ECKD2H471KB	C.CAPACITOR 500V 470P	1	
C1704	ECEA1VKA220	E.CAPACITOR 35V 22U	1	
C1705	ECKF1H103ZF	C.CAPACITOR 50V 0.01U	1	
C1706	ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C7501	ECRHC030E11	V.CAPACITOR	1	
C7502	ECEA0JKS330	E.CAPACITOR 6.3V 33U	1	
C7503	ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C7504	ECUM1H223KBN	C.CAPACITOR CH 50V 0.022U	1	
C7505,06	ECEA1EKS4R7	E.CAPACITOR 25V 4.7U	2	
C7507,08	ECUM1H473ZFN	C.CAPACITOR CH 50V 0.047U	2	
C7509	ECUM1H060DCN	C.CAPACITOR CH 50V 6P	1	
C7510	ECUM1H180JCN	C.CAPACITOR CH 50V 18P	1	
C7511	ECUM1H220JCN	C.CAPACITOR CH 50V 22P	1	
C7512	ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C7513	ECEA0JKA221	E.CAPACITOR 6.3V 220U	1	
C7514,15	ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	2	
C7517	ECEA0JKS470	E.CAPACITOR 6.3V 47U	1	
C7518	ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C7519-30	ECUM1H270JCN	C.CAPACITOR CH 50V 27P	12	
C7531,32	ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	2	
C7533-36	ECUM1H270JCN	C.CAPACITOR CH 50V 27P	4	
C7537	ECEA1HKA220	E.CAPACITOR 50V 22U	1	
C7538	ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C7539	ECUM1H561JCN	C.CAPACITOR CH 50V 560P	1	
D1701	MA1270-H	DIODE	1	
D1702	MA185	DIODE	1	
D7501	MA3075	DIODE	1	
D7502-06	MA221	DIODE	5	
D7510,11	MA221	DIODE	2	
D7514	MA221	DIODE	1	
D7516-18	MA221	DIODE	3	
D7520-22	MA221	DIODE	3	
D7526	MA221	DIODE	1	
D7534	MA221	DIODE	1	
D7546-50	MA221	DIODE	5	
D7551-53	MA73	DIODE	3	
D7556-60	LN81RCPHL	LED	5	
D7562,63	MA221	DIODE	2	
DP7501	VSL0276	DISPLAY TUBE	1	
IC7501	M37502V4BS	IC	1	
IC7502	PST7026	IC	1	
IC7503	XIJ9021B	IC	1	
IC7504	PST7043	IC	1	
IC7505	BA6810S	IC	1	
L7501	VIQEL05S101K	COIL 100UH	1	
L7502	VLQ0188J330	COIL 33UH	1	
P7501,02	VJS3537A020G	CONNECTOR (FEMALE) 20P	2	
P7503	VJP3234B010	CONNECTOR (MALE) 10P	1	
P7504	VJP1246T	CONNECTOR (MALE) 6P	1	
P7505,06	VJS2183	CONNECTOR (FEMALE)	2	
PP7501,02	VJP3405A011W	CONNECTOR (MALE) 11P	2	
Q1701	2SD973A-R.VT	TRANSISTOR	1	
Q7501,02	MSD601	TRANSISTOR	2	
QR7501,02	MRN2403	TRANSISTOR-RESISTOR	2	
QR7503	MRN2402	TRANSISTOR-RESISTOR	1	
QR7506	MRN1402	TRANSISTOR-RESISTOR	1	
QR7507	MRN1404	TRANSISTOR-RESISTOR	1	
QR7508-11	MRN2404	TRANSISTOR-RESISTOR	4	
QR7512-14	MRN2403	TRANSISTOR-RESISTOR	3	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
R1701		ERJ6GEYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R1702		ERDS2TJ101	C.RESISTOR 1/4W 100	1	
R1703		ERJ6GEYJ101	M.RESISTOR CH 1/10W 100	1	
R7501,02		ERJ6GEYJ820	M.RESISTOR CH 1/10W 82	2	
R7503		ERJ6GEYG223	M.RESISTOR CH 1/10W 22K	1	
R7504		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R7505-07		ERJ6GEYJ473	M.RESISTOR CH 1/10W 47K	3	
R7508		ERJ6GEYJ272	M.RESISTOR CH 1/10W 2.7K	1	
R7509		ERJ6GEYJ331	M.RESISTOR CH 1/10W 330	1	
R7510		ERJ6GEYK106	M.RESISTOR CH 1/10W 10M	1	
R7511		ERJ6GEYJ224	M.RESISTOR CH 1/10W 220K	1	
R7512,13		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	2	
R7514-16		ERJ6GEYJ332	M.RESISTOR CH 1/10W 3.3K	3	
R7517,18		ERJ6GEYJ473	M.RESISTOR CH 1/10W 47K	2	
R7519-22		ERJ6GEYJ332	M.RESISTOR CH 1/10W 3.3K	4	
R7525,26		ERJ6GEYJ471	M.RESISTOR CH 1/10W 470	2	
R7527-29		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	3	
R7531-41		ERJ6GEYJ221	M.RESISTOR CH 1/10W 220	11	
R7542-56		ERJ6GEYJ332	M.RESISTOR CH 1/10W 3.3K	15	
R7557-59		ERJ6GEYJ681	M.RESISTOR CH 1/10W 680	3	
R7560-62		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	3	
R7564		ERJ6GEYJ272	M.RESISTOR CH 1/10W 2.7K	1	
R7565		ERJ6GEYJ392	M.RESISTOR CH 1/10W 3.9K	1	
R7566		ERJ6GEYJ104	M.RESISTOR CH 1/10W 100K	1	
R7567		ERJ6GEYJ272	M.RESISTOR CH 1/10W 2.7K	1	
R7568		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	
R7569		ERJ6GEYJ101	M.RESISTOR CH 1/10W 100	1	
R7570		ERJ6GEYJ681	M.RESISTOR CH 1/10W 680	1	
R7571		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	
R7572		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R7573		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	
R7574		ERJ6GEYJ221	M.RESISTOR CH 1/10W 220	1	
RX7501,02		EXBF6E104J	RESISTOR-RESISTOR	2	
RX7503		EXBF8E104J	RESISTOR-RESISTOR	1	
SW7501		ESD172255	SWITCH	1	
SW7502,03		ESD172355	SWITCH	2	
SW7504-07		ESD172255	SWITCH	4	
SW7508,09		ESD172355	SWITCH	2	
SW7510		ESD172255	SWITCH	1	
T1701		ETE13H80AY	SWITCH	1	
VR4004		EVNCBAA00B53	V.RESISTOR	1	
X7501		VSX0506	CRYSTAL OSCILLATOR	1	
X7502		VSX0094	CRYSTAL OSCILLATOR	1	
			MISCELLANEOUS		
		VMD0504	LED HOLDER	1	
		VJF1043	FIP HOLDER	1	
	■	VEP07739R	TIMER C.B.A.		(RTL)NV-HS1000EC
C1701		ECEA1CKA101	E.CAPACITOR 16V 100U	1	
C1702		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C1703		ECKD2H471KB	C.CAPACITOR 500V 470P	1	
C1704		ECEA1VKA220	E.CAPACITOR 35V 22U	1	
C1705		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	1	
C1706		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C7501		ECRHC030E11	V.CAPACITOR	1	
C7502		ECEA0JKS330	E.CAPACITOR 6.3V 33U	1	
C7503		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
C7504		ECUM1H223KBN	C.CAPACITOR CH 50V 0.022U	1	
C7505,06		ECEA1EKS4R7	E.CAPACITOR 25V 4.7U	2	
C7507,08		ECUM1H473ZFN	C.CAPACITOR CH 50V 0.047U	2	
C7509		ECUM1H060DCN	C.CAPACITOR CH 50V 6P	1	
C7510		ECUM1H180JCN	C.CAPACITOR CH 50V 18P	1	
C7511		ECUM1H220JCN	C.CAPACITOR CH 50V 22P	1	
C7512		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C7513		ECEA0JKA221	E.CAPACITOR 6.3V 220U	1	
C7514,15		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	2	
C7517		ECEA0JKS470	E.CAPACITOR 6.3V 47U	1	
C7518		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C7519-30		ECUM1H270JCN	C.CAPACITOR CH 50V 27P	12	
C7531,32		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	2	
C7533-36		ECUM1H270JCN	C.CAPACITOR CH 50V 27P	4	
C7537		ECEA1HKA220	E.CAPACITOR 50V 22U	1	
C7538		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C7539		ECUM1H561JCN	C.CAPACITOR CH 50V 560P	1	
D1701		MA1270-H	DIODE	1	
D1702		MA185	DIODE	1	
D7501		MA3075	DIODE	1	
D7502-06		MA221	DIODE	5	
D7510		MA221	DIODE	1	
D7512		MA221	DIODE	1	
D7514		MA221	DIODE	1	
D7517,18		MA221	DIODE	2	
D7520		MA221	DIODE	1	
D7522		MA221	DIODE	1	
D7526		MA221	DIODE	1	
D7532		MA221	DIODE	1	
D7534,35		MA221	DIODE	2	
D7546-50		MA221	DIODE	5	
D7551-53		MA73	DIODE	3	
D7556-61		LN81RCPHL	LED	6	
D7562,63		MA221	DIODE	2	
DP7501		VSL0276	DISPLAY TUBE	1	
IC7501		M37502V4BS	IC	1	
IC7502		PST7026	IC	1	
IC7503		XLJ9021B	IC	1	
IC7504		PST7043	IC	1	
IC7505		BA6810S	IC	1	
L7501		VIQEL05S101K	COIL 100UH	1	
L7502		VIQ0188J330	COIL 33UH	1	
P7501,02		VJS3537A020G	CONNECTOR (FEMALE) 20P	2	
P7503		VJP3234B010	CONNECTOR (MALE) 10P	1	
P7504		VJP1246T	CONNECTOR (MALE) 6P	1	
P7505,06		VJS2183	CONNECTOR (FEMALE)	2	
PP7501,02		VJP3405A011W	CONNECTOR (MALE) 11P	2	
Q1701		2SD973A-R.VT	TRANSISTOR	1	
Q7501,02		MSD601	TRANSISTOR	2	
QR7501,02		MRN2403	TRANSISTOR-RESISTOR	2	
QR7503		MRN2402	TRANSISTOR-RESISTOR	1	
QR7506		MRN1402	TRANSISTOR-RESISTOR	1	
QR7507		MRN1404	TRANSISTOR-RESISTOR	1	
QR7508-11		MRN2404	TRANSISTOR-RESISTOR	4	
QR7512-14		MRN2403	TRANSISTOR-RESISTOR	3	
R1701		ERJ6GEYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R1702		ERDS2TJ101	C.RESISTOR 1/4W 100	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
R1703	ERJ6GEYJ101	M.RESISTOR CH 1/10W 100	1	
R7501,02	ERJ6GEYJ820	M.RESISTOR CH 1/10W 82	2	
R7503	ERJ6GEYG223	M.RESISTOR CH 1/10W 22K	1	
R7504	ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R7505-07	ERJ6GEYJ473	M.RESISTOR CH 1/10W 47K	3	
R7508	ERJ6GEYJ272	M.RESISTOR CH 1/10W 2.7K	1	
R7509	ERJ6GEYJ331	M.RESISTOR CH 1/10W 330	1	
R7510	ERJ6GEYK106	M.RESISTOR CH 1/10W 10M	1	
R7511	ERJ6GEYJ224	M.RESISTOR CH 1/10W 220K	1	
R7512,13	ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	2	
R7514-16	ERJ6GEYJ332	M.RESISTOR CH 1/10W 3.3K	3	
R7517,18	ERJ6GEYJ473	M.RESISTOR CH 1/10W 47K	2	
R7519-22	ERJ6GEYJ332	M.RESISTOR CH 1/10W 3.3K	4	
R7525,26	ERJ6GEYJ471	M.RESISTOR CH 1/10W 470	2	
R7527-30	ERJ6GMZOROO	M.RESISTOR CH 1/10W 0	4	
R7531-41	ERJ6GEYJ221	M.RESISTOR CH 1/10W 220	11	
R7542-56	ERJ6GEYJ332	M.RESISTOR CH 1/10W 3.3K	15	
R7557-59	ERJ6GEYJ681	M.RESISTOR CH 1/10W 680	3	
R7560-62	ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	3	
R7564	ERJ6GEYJ272	M.RESISTOR CH 1/10W 2.7K	1	
R7565	ERJ6GEYJ392	M.RESISTOR CH 1/10W 3.9K	1	
R7566	ERJ6GEYJ104	M.RESISTOR CH 1/10W 100K	1	
R7567	ERJ6GEYJ272	M.RESISTOR CH 1/10W 2.7K	1	
R7568	ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	
R7569	ERJ6GEYJ101	M.RESISTOR CH 1/10W 100	1	
R7570	ERJ6GEYJ681	M.RESISTOR CH 1/10W 680	1	
R7571	ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	
R7572	ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R7573	ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	
R7574	ERJ6GEYJ221	M.RESISTOR CH 1/10W 220	1	
RX7501,02	EX8F6E104J	RESISTOR-RESISTOR	2	
RX7503	EXBF8E104J	RESISTOR-RESISTOR	1	
SW7501	ESD172255	SWITCH	1	
SW7502,03	ESD172355	SWITCH	2	
SW7504-07	ESD172255	SWITCH	4	
SW7508,09	ESD172355	SWITCH	2	
SW7510	ESD172255	SWITCH	1	
T1701	ETE13K80AY	SWITCH	1	
VR4004	EVNCBAA00B53	V.RESISTOR	1	
X7501	VSX0506	CRYSTAL OSCILLATOR	1	
X7502	VSX0094	CRYSTAL OSCILLATOR	1	
		MISCELLANEOUS		
	VMD0504	LED HOLDER	1	
	VJF1043	FIP HOLDER	1	
■	VEP01558C	POWER C.B.A.		(RTL)<!>
C1103	VCC0021	C.CAPACITOR V	1	<!>
C1106	VCC0021	C.CAPACITOR V	1	<!>
C1109	VCC0023	C.CAPACITOR	1	<!>
C1110	ECQU2A224MN	P.CAPACITOR 250V 0.22U	1	<!>
C1111	ECQU2A154MNB	P.CAPACITOR 250V 0.15U	1	<!>
C1112	ECEC2GG680	E.CAPACITOR 400V 68U	1	
C1113	ECQE6473KF	P.CAPACITOR 50V	1	
C1114	VCK0106K121	C.CAPACITOR	1	
C1115	ECA1VXLV470	E.CAPACITOR 35V 47U	1	
C1116	ECA1CXLV101	E.CAPACITOR 16V 100U	1	
C1117	ECKF1H102KB	C.CAPACITOR 50V 1000P	1	
C1118	ECKF1H271KB	C.CAPACITOR 50V 270P	1	
C1121	ECCD2H101J	C.CAPACITOR 500V 100P	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
C1123	ECEA1JFE560	E.CAPACITOR 63V 56U	1	
C1124	ECEA1CFE331	E.CAPACITOR 16V 330U	1	
C1125	ECEA1DFZ681	E.CAPACITOR 20V 680U	1	
C1126	ECEA1AFZ681	E.CAPACITOR 10V 680U	1	
C1127	ECEA1JFE470	E.CAPACITOR 63V 47U	1	
C1128	ECEA1CFE121	E.CAPACITOR 16V 120U	1	
C1129	ECEA1DFZ681	E.CAPACITOR 20V 680U	1	
C1130	ECEA1AFZ681	E.CAPACITOR 10V 680U	1	
C1131-34	ECKF1H102ZF	C.CAPACITOR 50V 1000P	4	
C1135,36	ECA1CGE101X	E.CAPACITOR 16V 100U	2	
C1139	ECKF1H103ZF	C.CAPACITOR 50V 0.01U	1	
C1140,41	ECA1CGE101X	E.CAPACITOR 16V 100U	2	
D1102	EM1B	DIODE	1	<!>
D1103	AP01C	DIODE	1	
D1104	MA178	DIODE	1	
D1105	1SS254	DIODE	1	
D1106	MA4200H	DIODE	1	
D1107	MA723VT	DIODE	1	
D1108	10ELS2	DIODE	1	
D1109	MA185	DIODE	1	
D1110	FMLG12SP	DIODE	1	
D1111	FMBG14L	DIODE	1	
D1112	SV03YS	DIODE	1	
D1115-17	EM1B	DIODE	3	<!>
D1118	MA4056-LVT	DIODE	1	
D1119	1SS254	DIODE	1	
D1120	MA4120H	DIODE	1	
D1121,22	1SS254	DIODE	2	
IC1101	STRM6547LF	IC	1	<!>
IC1103	SI3120C	IC	1	
IC1104	SI-3050CA	DIODE	1	
L1101,02	ELF18D221F	COIL	2	<!>
L1103-09	EXCELSA35	COIL	7	
L1110	VLP0074	COIL	1	
L1111,12	ELESE101KA	COIL 100UH	2	
L1113,14	ELC07B009	COIL	2	
L1115,16	VLP0083	COIL	2	
P1101	VJS2625	AC INLET	1	<!>
P1102	VJP1930T	CONNECTOR (MALE)	1	
P1103	VJP1149	CONNECTOR (MALE) 3P	1	
Q1101	PC120FY	TRANSISTOR	1	<!>
Q1102	2SD1996-R	TRANSISTOR	1	
R1101	ERC12AGM334	S.RESISTOR 1/2W 330K	1	<!>
R1102	VRE0087	M.RESISTOR	1	
R1103	ERG3SJ823	M.RESISTOR 1/16W 82K	1	
R1104,05	ERDS2FJ224	C.RESISTOR 1/4W 220K	2	
R1106	ERDS2FJ221	C.RESISTOR 1/4W 220	1	
R1109	ERDS2FJ561	C.RESISTOR 1/4W 560	1	
R1110	ERDS2FJ391	C.RESISTOR 1/4W 390	1	
R1111	ERX1SJ1R5	M.RESISTOR 1W 1.5	1	
R1112	ERDS2FJ103	C.RESISTOR 1/4W 10K	1	
R1113	ERDS2FJ682	C.RESISTOR 1/4W 6.8K	1	
R1114	ERDS2FJ101	C.RESISTOR 1/4W 100	1	
R1115	ERDS2TJ271	C.RESISTOR 1/4W 270	1	
R1122	EROS2CKG62R0	M.RESISTOR 1/2W 62	1	
R1123	EROS2CKG3001	M.RESISTOR 1/4W 3K	1	
R1124	EROS2CKG20R0	M.RESISTOR 1/2W 20	1	
R1125	EROS2CKG1201	M.RESISTOR 1/4W 1.2K	1	
R1126	ERDS1TJ562	C.RESISTOR 1/2W 5.6K	1	
R1127	ERDS2FJ224	C.RESISTOR 1/4W 220K	1	
T1101	VLT0718	TRANSFORMER	1	<!>

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
			MISCELLANEOUS		
		VJF0318	FUSE HOLDER	2	<!>
		VMZ2212	CAPACITOR COVER	3	<!>
	■	VEX0126	CYLINDER DRIVE C.B.A.		(RTL)
C2901-03		EC[illegible]A1VSNZR2	E.CAPACITOR 35V 2.2U	3	
C2904-06		ECUM1E104KBM	C.CAPACITOR CH 25V 0.1U	3	
C2907		ECUM1E683KBM	C.CAPACITOR CH 25V 0.068U	1	
C2908		ECUM1E473KBM	C.CAPACITOR CH 25V 0.047U	1	
C2909		ECQV1H104JS	P.CAPACITOR 50V 0.1U	1	
C2910,11		ECEA1CKS100	E.CAPACITOR 16V 10U	2	
C2912		ECEA0JKS220	E.CAPACITOR 6.3V 22U	1	
IC2901		AN3815K	IC	1	
P2901		VJP2603W	CONNECTOR (MALE)	1	
P2902		VJP1232T	CONNECTOR (MALE) 5P	1	
R2901		ERX12SJR47	M.RESISTOR CH 1/2W 0.47	1	
TH2901		VRH0017	THERMISTOR	1	
			MISCELLANEOUS		
		VMA8089	MAIN HOLDER	1	
	■	-----------	MECHANISM CONNECTION C.B.A.		(RTL)
D1501		LN59L.VT	IC	1	
IC1501,02		ON1387	DIODE	2	
P1503		VJS3316A002	CONNECTOR (FEMALE) 2P	1	
P1504		VJS3317A004	CONNECTOR (FEMALE) 4P	1	
P1505		VJS3537B014G	CONNECTOR (FEMALE) 14P	1	
Q1501,02		PN205L-NC.VT	TRANSFORMER	2	
SW1501		VES0695	JACK	1	
SW1502		VST0176	SWITCH	1	
			MISCELLANEOUS		
		VMD2029	REEL GUIDE	1	
	■		MOTOR C.B.A.		(RTL)
			MISCELLANEOUS		
		VJP3316B002	CONNECTOR (FEMALE) 2P	1	

INTERNAL REFERENCE CODES

NOTE: This chart is only for internal reference.
Do not order any parts according to these codes.

P. C. B.	FILM CODE
SYUGO (MAIN/SUB A/CAP DR)	HOA002-0231A
SYUGO (L&C/SUB L&C)	HOA000-0242A
POWER	HOA000-01558
INPUT & OUTPUT	HOA000-03A72
TV DEMODULATOR(EC)	HOA000-07757
TV DEMODULATOR(B)	HOA000-07680
DECORDER(EC)	HOA000-07671
NICAM DECORDER	HOA000-07675
AFC DEF(B)	HOA000-07786
HEAD AMP	HOA004-05176
HI-FI AUDIO	HOA000-04447
VR	HOA001-06926
TIMER	HOA000-07739
REC RF AMP	HOA000-03A90
TBC	HOA000-03A53
MECHA CONNECTION	HOA000-00T87
CYLINDER DRIVE	HOA002-00R99
POWER TRANSISTER	HOA000-00S86
LOADING MOTOR	HOA000-00S75

Panasonic
MATSUSHITA ELECTRIC

Printed in Japan